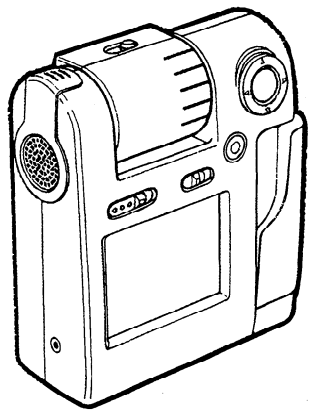
SHARP SERVICE MANUAL

S69I9VN-EZ1U/



MPEG-4 DIGITAL RECORDER

MODEL VN-EZ1U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

	Page
1. IMPORTANT SERVICE NOTES	1-1
2. SPECIFICATIONS	2-1
3. PART NAMES	3-1
4. DISASSEMBLY OF THE SET	4-1
5. TEST MODE	5-1
6. BLOCK DIAGRAM	6-1
7. OSCILLATOR, DIVIDING AND MULTIPLY MAP/8. POWER CONTROL FLOW	7-1
9. TROUBLESHOOTHING	9-1
10.IC FUNCTION LIST	10-1
11.SEMICONDUCTOR LEAD IDENTIFICATION	11-1
12.WIRING DIAGRAM	12-1
13.SCHEMATIC DIAGRAMS	13-1
14.PRINTED WIRING BOARD ASSEMBLIES	14-1
15.REPLACEMENT PARTS LIST	15-1
16.PACKING OF THE SET	16-1

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

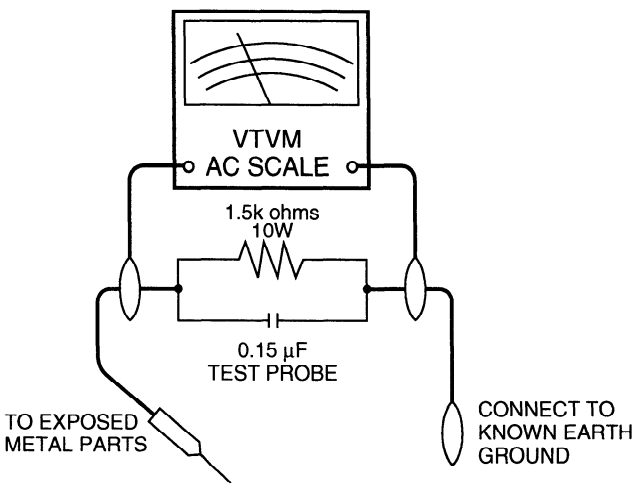
1. IMPORTANT SERVICE NOTES

BEFORE RETURNING THE VIDEO CAMERA RECORDER

Before returning the video camera recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video camera recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known ground, such as a water pipe or conduit.
- Use a VTVM or VOM with 1000 ohm per volt, or higher sensitivity or measure the AC voltage drop across the resistor (See Diagram).
- Move the resistor connection to all exposed metal parts having a return path to the chassis (antenna connections, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug (a non polarized adaptor plug must be used but only for the purpose of completing these checks) on the set and repeat the AC voltage measurements for each exposed metallic part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video camera recorder to the user.



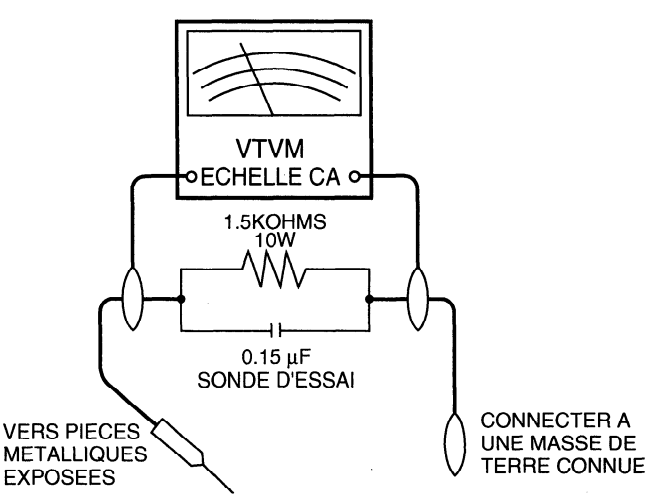
1. NOTES DE SERVICE IMPORTANTES

AVANT DE RENDRE LE MAGNETOSCOPE

Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boucliers, les réseaux de résistance / condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la maniére suivante.

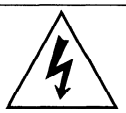
- Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
- Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5 kohm en parallèle avec un condensateur de 0,15 µF en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
- Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
- Déposer la connexion de la résistance à toutes les pièces métalliques exposées ayant un parcours de retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque piéce métallique exposée. Toute lecture de 0,45 V rms (ceci correspond à 0,3 mA rms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



WARNING :TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO WET LOCATIONS.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

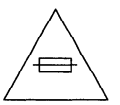


This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.

This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION

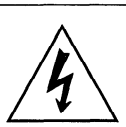
This symbol mark means following.
For continued protection against fire hazard, replace only with same type fuse.
(F901; 1.75A 24V, F902; 1.75A 24V, F903; 1A 24V, F904; 1A 24V, F905; 1A 24V)



ATTENTION: POUR REDUIRE LES RESQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.

ATTENTION
RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR

ATTENTION: AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPARE PAR L'UTIUSATEUR, CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.

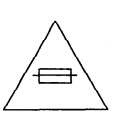


Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.

Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et àl'entretien se trouvent dans le manuel accompagnant l'appareil.

ATTENTION

Ce symbole signifie que l'on devra utiliser un fusible de même type (F901; 1.75A 24V, F902; 1.75A 24V, F903; 1A 24V, F904; 1A 24V, F905; 1A 24V) pour assurer la sécurité.



2. SPECIFICATIONS

MPEG-4 Digital Recoder

Power requirement:	DC 6 V
Power consumption:	[Recording] 3.4 W [Playback] 2.7 W
Record format/Image compression system:	[Movie] MPEG-4/ASF [Still] JPEG base line conformance/JPEG (Exif 2.1)
Sound recording system:	ADPCM, monaural, 8 kHz sampling
Pixel composition:	[Movie] 160 × 120 pixels/320 × 240 pixels [Still] 640 × 480 pixels (square dots)
Recording medium:	SmartMedia card (SSFDC) (3.3 V) (2MB, 4MB, 8MB, 16MB, 32MB)
Photometry:	TTL center-weighted average metering
Exposure control:	Aperture-priority auto exposure
Pickup device:	1/4-inch square pixel color CCD image sensor (with approx. 350,000 pixels including optical black) progressive scanning
LCD Monitor:	1.8 inch color screen with approx. 61,000 pixels
Lens:	Fixed focus with macro positon, F=3.4/8 f=3.8 mm
Focus range:	[Normal] -▲ approx. 24" (60 cm) to ∞ [Macro] approx. 4" (10 cm)
White balance:	Automatic tracking, manual switching ("OUTDOOR"/"INDOOR")
Shutter speed:	Auto variable [Movie] 1/15 to 1/4000 second [Still] 1/4 to 1/4000 second
Self-timer:	10 second
Microphone:	Monaural nondirectivity
Speaker:	ø20 mm 100 mW output (monaural)
Operating temprature:	0°C to +40°C (32°F to 104°F)
Storage temprature:	-20°C to +60°C (-40°F to 140°F)
Operation humidity:	30% to 80% (with no dew formation)
Dimentions:	$3^{7}/_{32}$"(W) × $3^{17}/_{32}$"(H) × $1^{21}/_{32}$"(D) [81.4 mm (W) × 89.5 mm (H) × 42 mm (D)]
Weight:	0.33 lbs (148 g) [body only]/0.53 lb (240 g) [including a SmartMedia card, four AA-size alkaline batteries and a hand strap]

Supplied SmartMedia Card

Memory capacity:	4MB
Memory type:	NAND flash EEP-ROM
Power requirement:	3.3 V
Operating temprature:	0°C to +40°C (32°F to 104°F)
Storage temprature:	-20°C to +60°C (-4°F to 140°F)

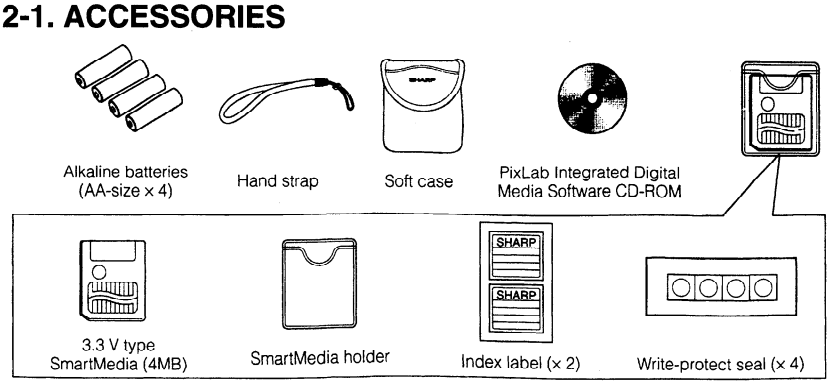
AC Adapter (UADP-0243TAZZ)

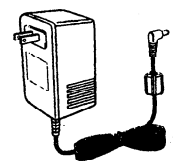
Power requirement:	AC 110-130 V/60 Hz
DC output:	DC 6.0 V/700 mA
Operating temperature:	0°C to +40°C (32°F to 104°F)
Storage temprature:	-20°C to +60°C (-4°F to 140°F)
Dimensions (approx.):	$2^{3}/_{8}$"(W) × $3^{3}/_{8}$"(H) × $1^{29}/_{32}$"(D) [60 mm (W) × 86 mm (H) × 49 mm (D)]
Weight (approx.):	1.08 lbs (490 g)

Specifications are subject to change without notice.

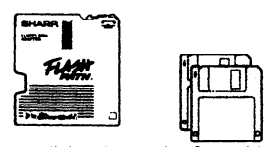
* Minimum ilumination: Since there is no widely accepted testing procedure for determining minimum illumination capability, lux ratings are comparable only between models from the same manufacturer.

2-1. ACCESSORIES





AC adapter
UADP-0243TAZZ

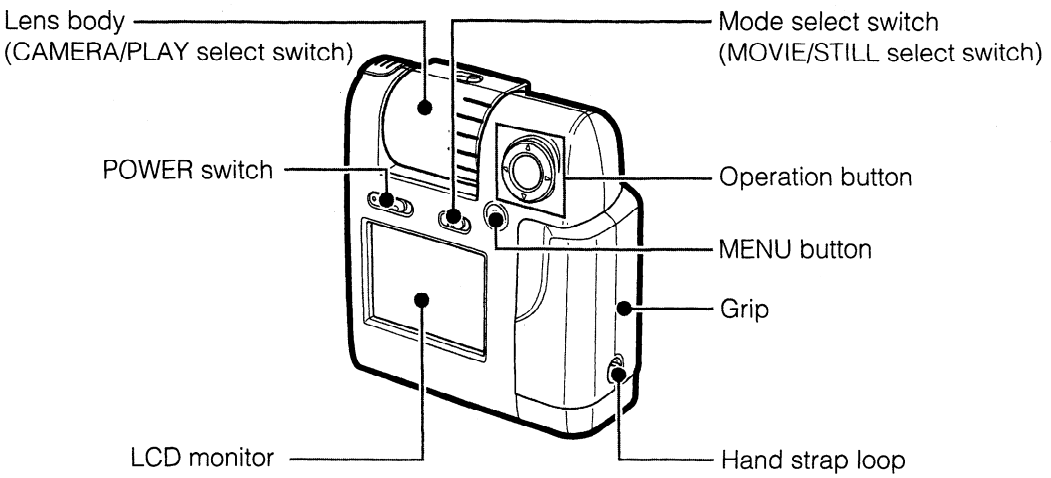


Floppy disk adapter for SmartMedia™
VR-1FPN
RUNTK0350TAZZ

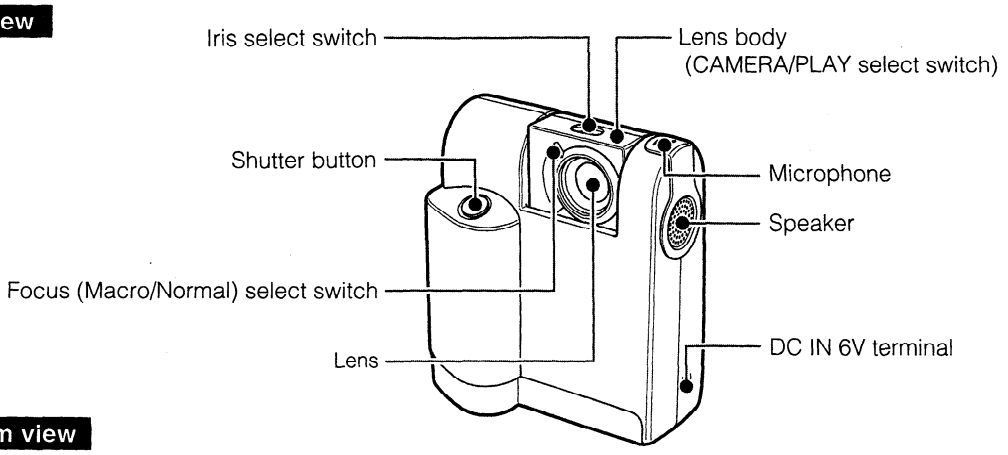
3. PART NAMES

For details on the use of each control.

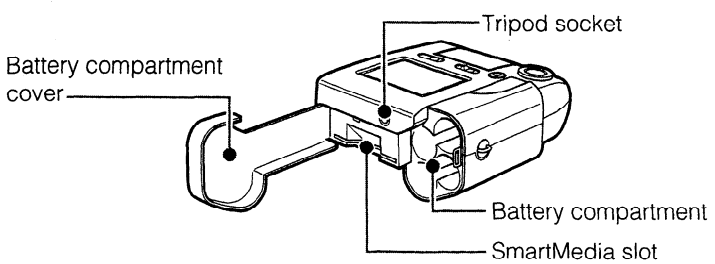
Front view



Left view



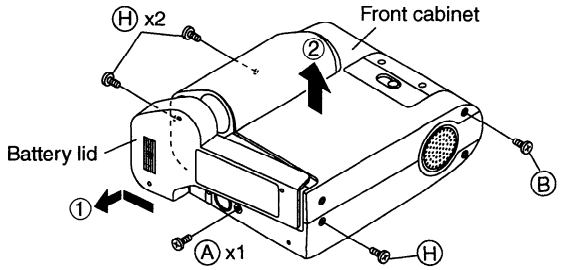
Bottom view



4. DISASSEMBLY OF THE SET

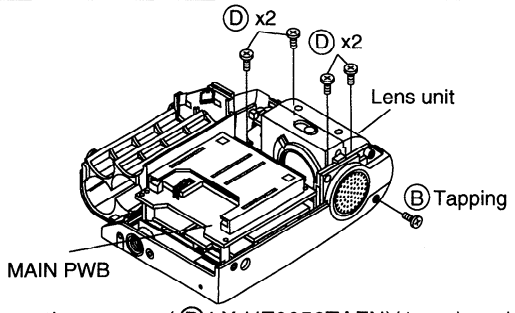
*For assembly, tighten the screw to the torque of 0.5+0.1/-0 kg cm.
*Previously remove the smart medium unit.

1.



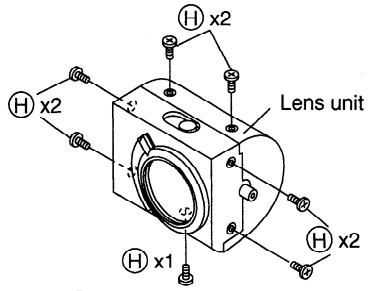
· Remove the screws (ⒶLX-BZ0210TAFN)(1pcs.) and (ⒷLX-HZ0056TAFN)(1pcs.) and (ⒽLX-BZ0208TAFN)(3pcs.).
· Open the battery lid as instructed with ①.
· Remove the front cabinet, lifting it as instructed with ②.

2.



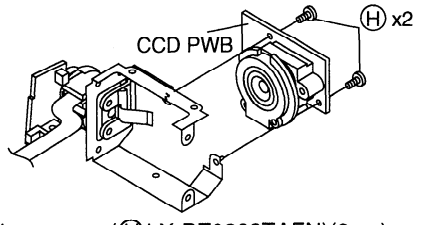
· Remove the screws (ⒷLX-HZ0056TAFN)(1pcs.) and (ⒹLX-HZ0062TAFF)(4pcs.).
· Lift the lens unit, and remove the CCD flex and tilt connector across the main PWB.
· Remove the operation key flex connector and SP microphone connector, and lift the main PWB.

3.



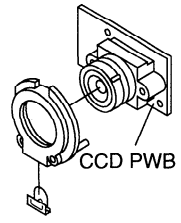
· Remove the screws (ⒽLX-BZ0208TAFN)(7pcs.).

4.



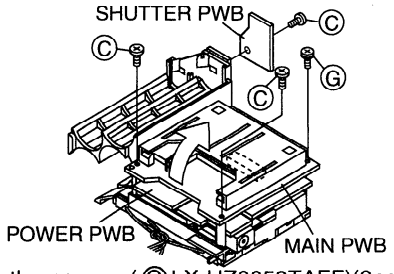
· Remove the screws (ⒽLX-BZ0208TAFN)(2pc.).
· Remove the CCD flex.

5.



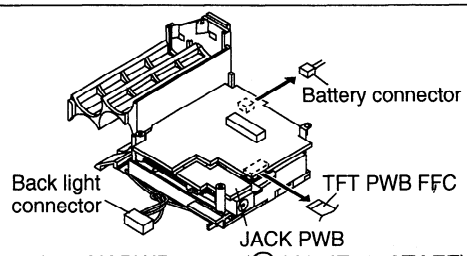
· Remove the CCD PWB.

6.



· Remove the screws (ⒸLX-HZ0058TAFF)(2pcs.) and (ⒼLX-HZ0206TAFN)(1pcs.).
· Pressing the power PWB to prevent it from floating, lift the main PWB in the arrow direction. (Take care that the board-to-board connector is slightly inner than the center.)
· Remove the screw (ⒸLX-HZ0058TAFF) of the shutter PWB, and the main PWB will be removed.

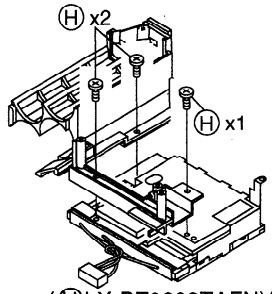
7.



· Remove the JAK PWB screw (ⒹLX-HZ0062TAFF)(1pcs.), the battery connector, TFT PWB FFC and back light connector, and the power PWB will be removed.

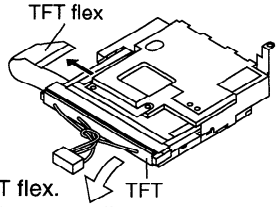
Note: As far as the power PWB is routed to ⚠, connect the black lead wire of the jack PWB directly to the battery terminal. From ⚠, solder two lead wires
from the battery terminal to the power PWB and the black lead wire from the jack PWB to the land near the battery connector.

8.



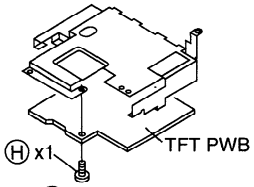
· Remove the screws (ⒽLX-BZ0208TAFN)(3pcs.).

9.



· Remove the TFT flex.
· Pull off TFT in the arrow direction.

10.



· Remove the screw (ⒽLX-BZ0208TAFN), and TFT PWB will be removed.

4-1. CAUTION ON ASSEMBLY

1. Caution for wiring treatment of rear cabinet

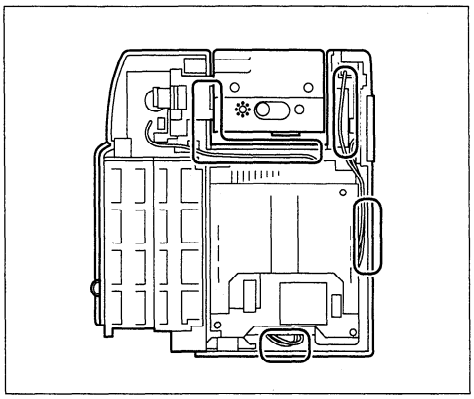


Fig. 1. Rear cabinet (Whole)

- Check whether the flexible and lead lines framed with ▭ in the left figure swell out or not.

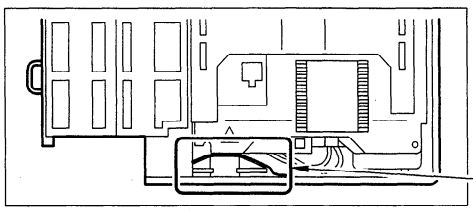
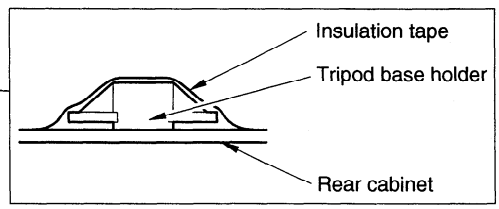


Fig. 2. Rear cabinet (Bottom)



- Check whether the insulation tape is peeled off on the base holder of the tripod framed with ▭ in the left figure or not.

2. Caution when joining the rear cabinet and front cabinet

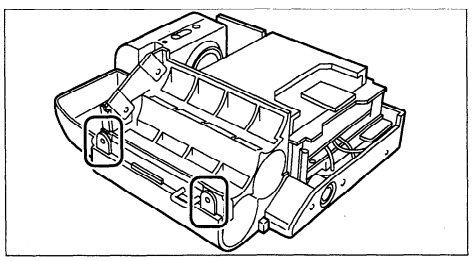


Fig. 3. Rear cabinet (Side face)

- Take care to prevent the rear cabinet framed with ▭ in the left figure from being outside the front cabinet.

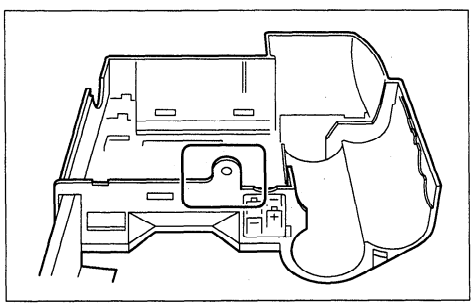
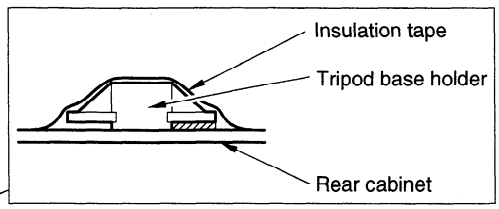


Fig. 4. Front cabinet (Bottom)

- Take care to insert the projection of the front cabinet framed with ▭ in the left figure into the area (▒ in the figure below) between the rear cabinet and tripod base holder.



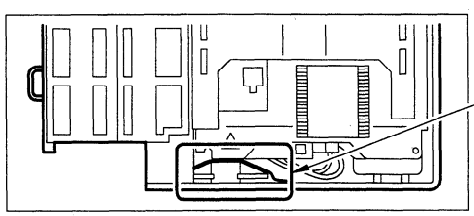


Fig. 5. Rear cabinet (Bottom)

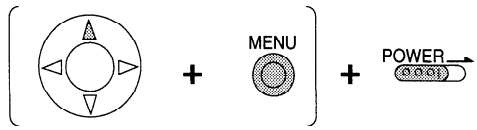
5. TEST MODE

The camera has two kinds of the test mode functions, mode 1 and mode 2, which are used for development/production/service.

5-1. HOW TO ENTER INTO THE MODE 1 (INITIAL SCREEN OF MODE 1)

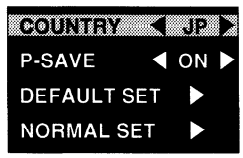
Mode for setting the CSD display language, clock display and so on

1) Pressing the ▲ key and MENU key, turn on the POWER switch.



2) After BUSY is displayed, the initial screen of Mode 1 is displayed.

Initial screen of Mode 1



←Changeover of OSD display language and clock display.
←Changeover of power save ON/OFF
←Return of user setting to default setting
←The above setting is determined.

5-1-1. Changeover of OSD display language and clock display (linked)

1) Select COUNTRY with ▲ or ▼ key, and select the country display with ◀ or ▶ key.
2) Select NORMAL SET with ▲ or ▼ key, and determine it with ▶ key.
3) End the setting with POWER OFF.

Country display	OSD language display	Clock display		
		Year(Y). Month(M). Day(D)	Time	
JP	Japanese	YYYY. MM. DD	AM 12:00	12 o'clock at the daytime is 12:00PM, and 12 o'clock at thenighttime is 12:00AM.
US	English	MM. DD. YYYY	12:00 AM	
UK	English	DD. MM. YYYY	12:00 AM	
EU	English	DD. MM. YYYY	00:00	In 24H display, 12 o'clock at the nighttime is 00:00. * 12H display can be selected for user-set clock timing.

Note: When the country display is changed, apply "clock timing" in the user setting mode.

5-1-2. Changeover of power save ON/OFF

1) Select P-SAVE with ▲ or ▼ key, and select ON/OFF with ◀ or ▶ key.

Setting	Function
P-SAVE ON	Auto power-off is set unless anything is set for approx. 3 minutes.
P-SAVE OFF	Auto power-off is set.

2) Select NORMAL SET with ▲ or ▼ key, and determine it with ▶ key.
3) End the setting with POWER OFF.

5-1-3. Return of user setting to default setting

Any other user setting except OSD display language setting (Item 5-1-1) is all returned to the default setting.

1) Select DEFAULT SET with ▲ or ▼ key, and determine it with ▶ key.
2) End the setting with POWER OFF.

5-2. MODE 2 (INSPECTION/ADJUSTMENT MODE)

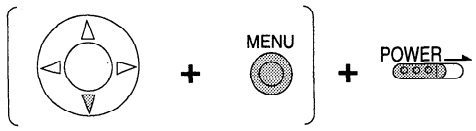
[Note]: Since the data of EEPROM is rewritten if any address is selected and the data is changed, not only carefully operate it but also be sure to record the address and data before setting the data.

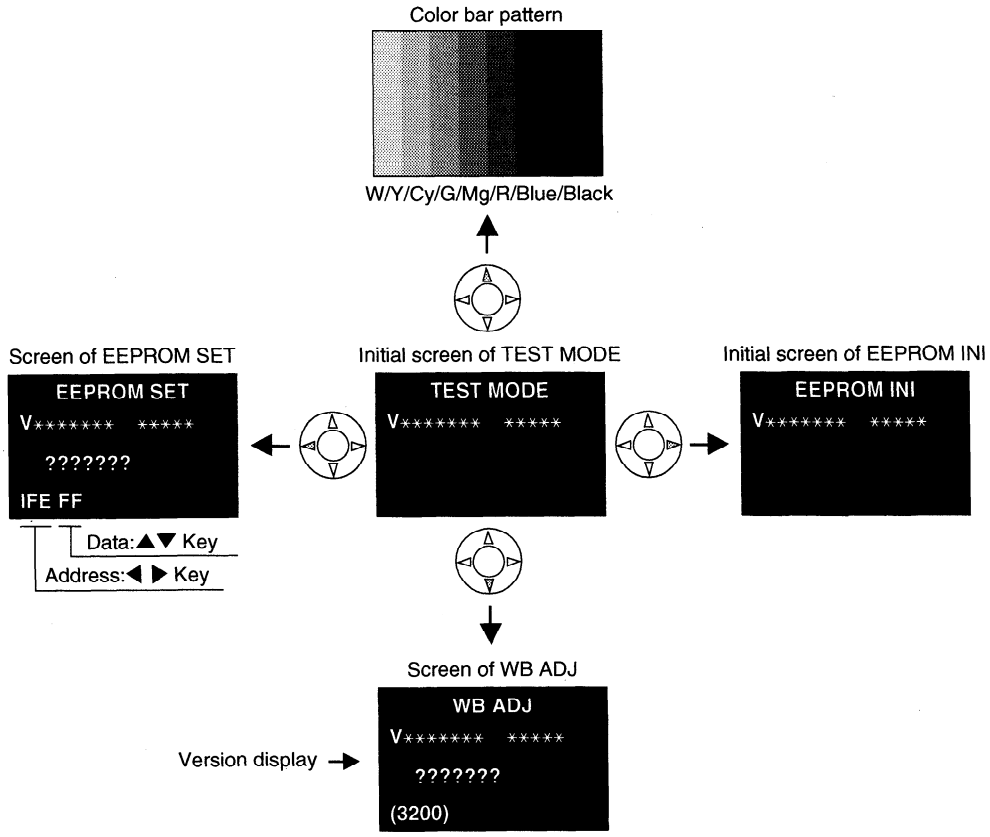
Objects, meters and jigs/tools necessary for inspection and adjustment

*Jig/tool name	Part code	Price code	Remarks
AC adapter	Separately available (VR-1AAW)	BB	
Halogen light x 2 pcs.	Commercially available		
Gray scale chart	JiGCHART-1	CP	
Siemens Star Chart	JiGCHART-11	CE	
Illuminance meter (0~3000 lux)	JiGMETER-1	CT	
Color temperature meter (1600~400000K)	JiGMETER-3	FF	
Color temperature conversion filter (3200→6800K) HOYA"LB-165"	JiGHOYA-LB165	BH	
Extension cable 30pin, Main (CN204) - Power (CN906)	QCNW-1948TAZZ	BS	New
Extension cable 10pin, Main (CN202) - Control (CN2901)	QCNW-1949TAZZ	AP	New
Extension cable 13pin, Main (CN31) - CCD (CN1)	QCNW-1950TAZZ	AP	New
Extension cable 13pin, Power (CN907) - TFT (CN803)	QCNW-1950TAZZ	AP	New

How to enter into the test mode (initial screen of TEST MODE)

1) Pressing the ▼ key and MENU key, turn on the POWER switch.
2) When BUSY is displayed on the screen, release the ▼ key and MENU key, and the initial screen of the test mode will be displayed. (Refer to the center of the following figure.)
3) Shift to each mode with the operation button of the main unit.
4) After setting is completed, press the MENU key, and it will return to the initial screen of the test mode. Then turn off the power.





5-2-1. Method of displaying the test pattern

To inspect and adjust the liquid crystal the color bar and monochrome pattern can be displayed.

■Method of displaying the color bar (75% modulated)

1) The initial screen of the test mode is displayed.
2) Press the ▲ key to display the color bar.
3) Press the MENU key, and it will return to the initial screen of the test mode. Then turn off the power.

■Method of displaying various patterns

1) The initial screen of the test mode is displayed.
2) Press the ◀ key to display EEPROM SET screen.
3) Press the ◀ key to display Address 1FE of EEPROM.
4) Press the ▲ key to set 00 as the data of Address 1FE.
5) Press the ▲ or ▼ key to vary the data, and the patterns in the following table will be displayed.

Address (h)	Data (h)	Display pattern
1FE	01	White signal 40%
	02	White signal 100%
	03	Black signal
	04	Color bar signal
	05	Red signal:The signal level is the same as that of the color bar.
	06	Green signal:The signal level is the same as that of the color bar.
	07	Blue signal:The signal level is the same as that of the color bar.

6) Set FF as the data of Address 1FE of EEPROM.
7) Press the MENU key, and it will return to the initial screen of the test mode. Then turn off the power.

5-2-2. Method of selecting VALID/INVALID of the battery lid switch

For disassembly and operation, set the switch of the battery lid at VALID.

1) The initial screen of the test mode is displayed.
2) Press the ◀ key to display EEPROM SET screen.
3) Select Address 1FD with ◀ or ▶ key, and set FF as the data with ▲ or ▼ key.
4) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting. Since the battery lid switch becomes invalid, it can be disassembled for inspection and repair.

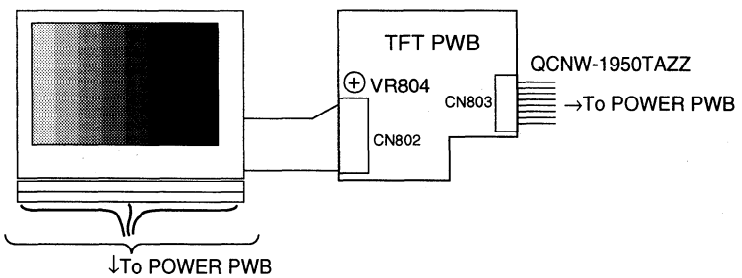
[Note]: After the inspection and repair are completed, be sure to return the data of Address 1FD to 00 (except FF), and turn the battery lid switch to VALID.

5-2-3. Method of adjusting the LCD display

For adjustment, remove TFT PWB from LCD unit.

a) Horizontal position adjustment

1) The initial screen of the test mode is displayed.
2) Press the ▲ key to display the color bar on the screen.
   Or press ◀ key, and EEPRROM SET screen will be displayed. Select Address 1FE with ◀ or ▶ key, and set the data at 04 with ▲ or ▼ key, and the color bar will be displayed.
3) Adjust VR804 on the TFT PWB to equalize the lateral width of the white and black bars at both ends of the color bar displayed on the screen.



4) After adjustment, set FF as the data of Address 1FE with ▲ or ▼ key.
5) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting.

b) Common bias adjustment

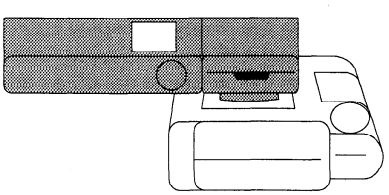
[Note]: Apply this after aging of approx. 5 minutes. The back light set by the user is regarded as standard.

1) The initial screen of the test mode is displayed.
2) Press the ◀ key to display EEPROM SET screen.
3) Select Address 1FE with ◀ or ▶ key, and set 00 as the data with ▲ or ▼ key.
4) Bring the lens unit into the shooting state (EE display).
5) Select Address 1F8 with ◀ or ▶ key.
6) Shoot the gray scale, and vary the data with ▲ or ▼ key to find such a point as the black sinks to the deepest.
7) After adjustment, select Address 1FE with ◀ or ▶ key, and set FF as the data with ▲ or ▼ key.
8) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting.

c) White balance adjustment

[Note]: Apply this after aging of approx. 5 minutes. The back light set by the user is regarded as standard.

1) The initial screen of the test mode is displayed.
2) Press the ◀ key to display EEPROM SET screen.
3) Select Address 1FE with ◀ or ▶ key, and set 01 as the data with ▲ or ▼ key. (White 40% pattern is displayed.)
4) Bring the sensor unit of the color thermosensor into contact with the screen of the LCD monitor, and measure the color temperature (M) and compensation value (CC).



[Note]: To prevent the LCD monitor screen from being injured at this time, don't press the sensor unit of the color thermometer or rub it.

To gain the color temperature of 7600 ± 200K and the compensation value of 50 ± 2, select Address 1F5 or 1F6 with ◀ or ▶ key, and adjust the data with ▲ or ▼ key.

[Note]: Take the measurement 2 or 3 times to reduce the error.
Select the dark place to prevent an excess light from entering the sensor unit of the color thermometer.
First adjust the color temperature into the standard range, and adjust the compensation value (CC).

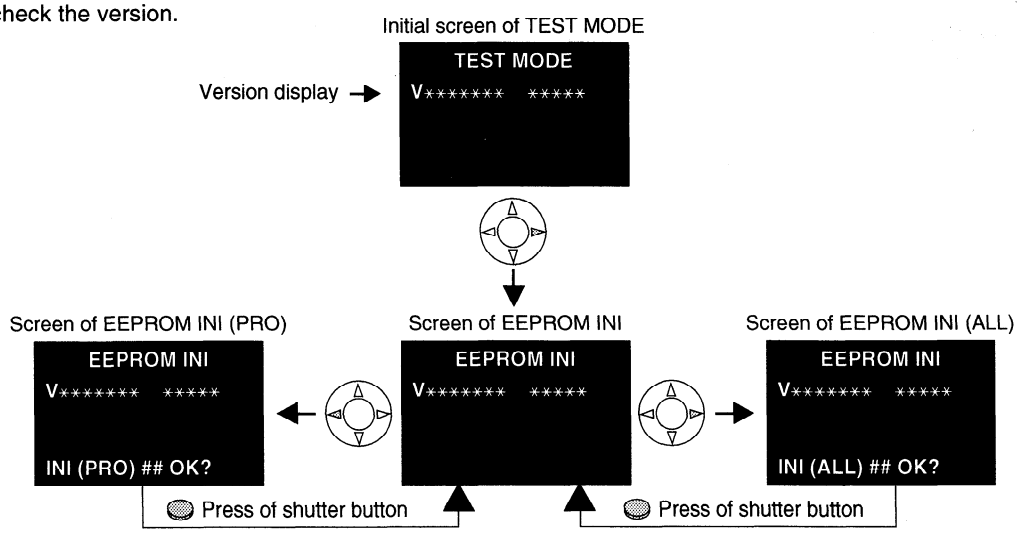
Color temperature	Compensation value	Address 1F5 (B) ◀	Address 1F6 (R) ▶
Low	Low	▼Down	Fixed
High	Low	Fixed	▼Down
Low	High	Fixed	▲Up
High	High	▲Up	Fixed
Low	Within standard	▼Down	▲Up
High	Within standard	▲Up	▼Down
Within standard	Low	▼Down	▼Down
Within standard	High	▲Up	▲Up
Within standard	Within standard	Adjustment end	Adjustment end

5-2-4. EEPROM INI (initial) method

Apply this when EEPROM is replaced or the version of the microcomputer is increased.

■Adjustment preparation and check items

Before entering the initial screen of the test mode, insert the smart medium in which data is already written.
Moreover, check the version.



a) PRO (protect) mode

Rewrite the other data except the white balance setting, TFT setting and clock with the data in the smart medium.1) The initial screen of the test mode is displayed.

1) The initial screen of the test mode is displayed.
2) Press the ▶ key to display EEPROM INI screen.
3) Press the ◀ key to display INI (PRO) screen.
4) Press the shutter button to rewrite the data with the data in the smart medium.
   In approx. 1 second, it will automatically return to EEPROM INI screen.
5) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting.
6) Perform steps in "5-1-2. Return of user setting to default setting".
7) Then turn off the power to complete the setting.

b) ALL mode

Rewrite all data of EEPROM with the data in the smart medium.

1) The initial screen of the test mode is displayed.
2) Press the ▶ key to display EEPROM INI screen.
3) Press the ▶ key to display INI (ALL) screen.
4) Press the shutter button to rewrite the data with the data in the smart medium.
   In approx. 1 second, it will automatically return to EEPROM INI screen.
5) Perform steps in "5-2-3. Method of adjusting the LCD display" and "5-2-5. Camera (CCD white balance) adjusting method".
6) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting.
7) Perform steps in "5-1-2. Return of user setting to default setting".
8) Then turn off the power to complete the setting.

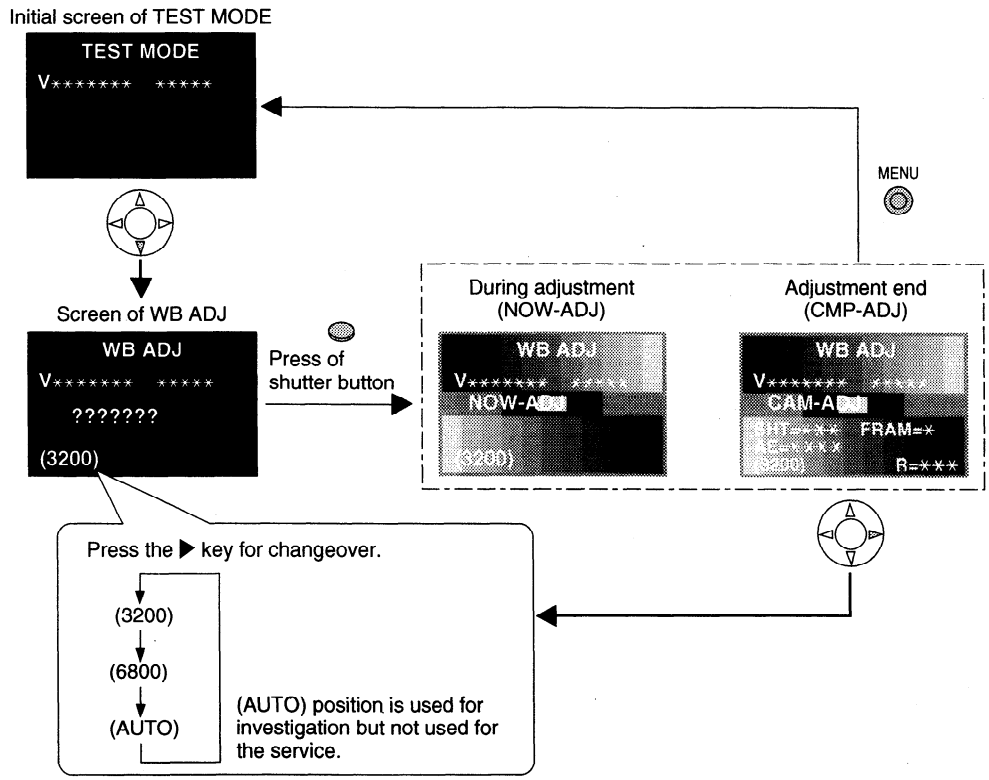
*Use the smart medium, FD adaptor or PC card which is copacked or optional.

5-2-5. Camera (CCD white balance) adjusting method

Preparation and check items before adjustment

For illumination, apply the approximation of the color temperature 3200K and illuminance 3000 lux, and the light source of 2 or more lamps are preferable for the even illumination.

Use the chart which is not stained or discolored.



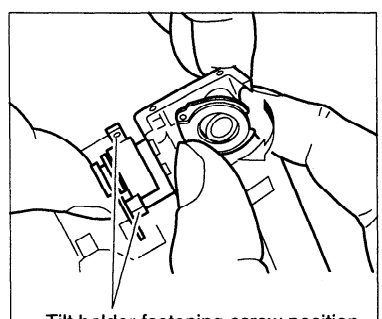
1) The initial screen of the test mode is displayed.
2) Press the ▼ key to display WB ADJ (3200) screen.
3) Shoot the gray scale chart.
4) Press the shutter button, and wait until CMP-ADJ is displayed.
5) Press the ▶ key to display WB ADJ (6800) screen.
6) Set up the color temperature replacement filter (LB-165: 3200K → 6800K conversion) in front of the lens.
7) Press the shutter button, and wait until CMP-ADJ is displayed.
8) Press the MENU key, and it will return to the initial screen of TEST MODE. Then turn off the power to complete the setting.

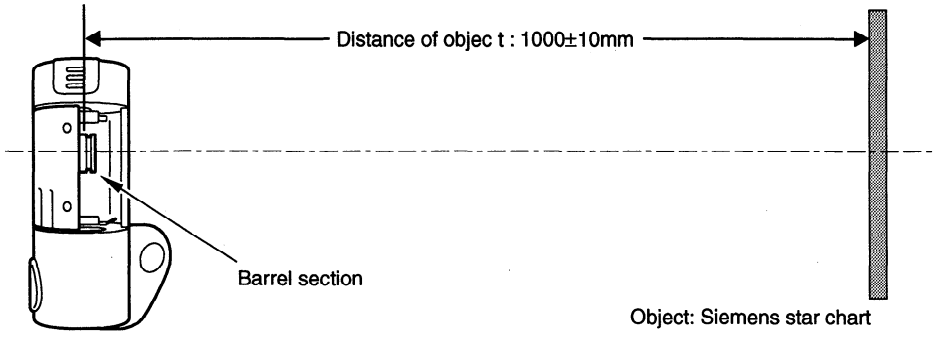
5-2-6. Lens back focus adjusting method

Preparation before adjustment

- Remove the front cabinet of the main unit, and remove the cabinet of the lens section. (The cabinet of the lens section can be disassembled or assembled only when the front cabinet of the main unit is removed.)
- Remove the macro adjusting ring. (Refer to the right figure.) Remove two tilt holder fastening screws on the main unit side, and holding the tilt section and CCD PWB section with left hand, pinch both ends of the macro adjusting ring with right hand, and gradually pull it up in the arrow direction. (At this time, take care to prevent missing the macro ring fastening hardware.)
- During adjustment, keep the front cabinet of the tilt holder main unit and the rear cabinet of the camera in the assembled state, and the main unit will be stabilized.

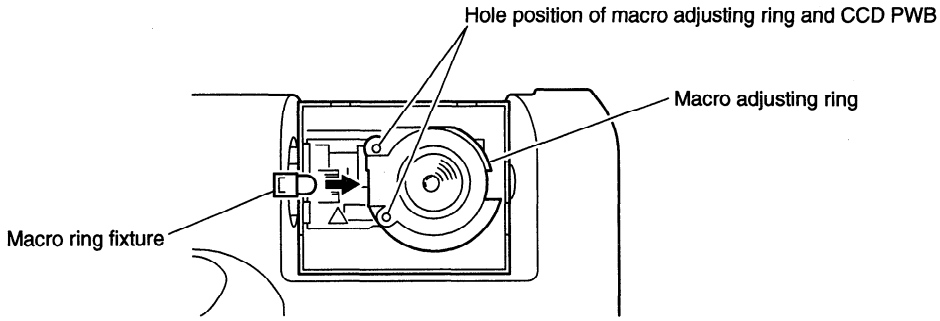
[Note]: Take care to prevent applying a forcible force to the tilt section.


Tilt holder fastening screw position



Adjusting method

1) When shooting, align the center of Siemens star chart to that of the motor screen.
2) Turning the barrel section of the lens with finger, adjust the lens focus to be the best, checking the monitor screen.
3) Align the macro adjusting ring to the position (level the notch rightward) in the figure below, and straightly insert the barrel from the front side without moving the barrel.



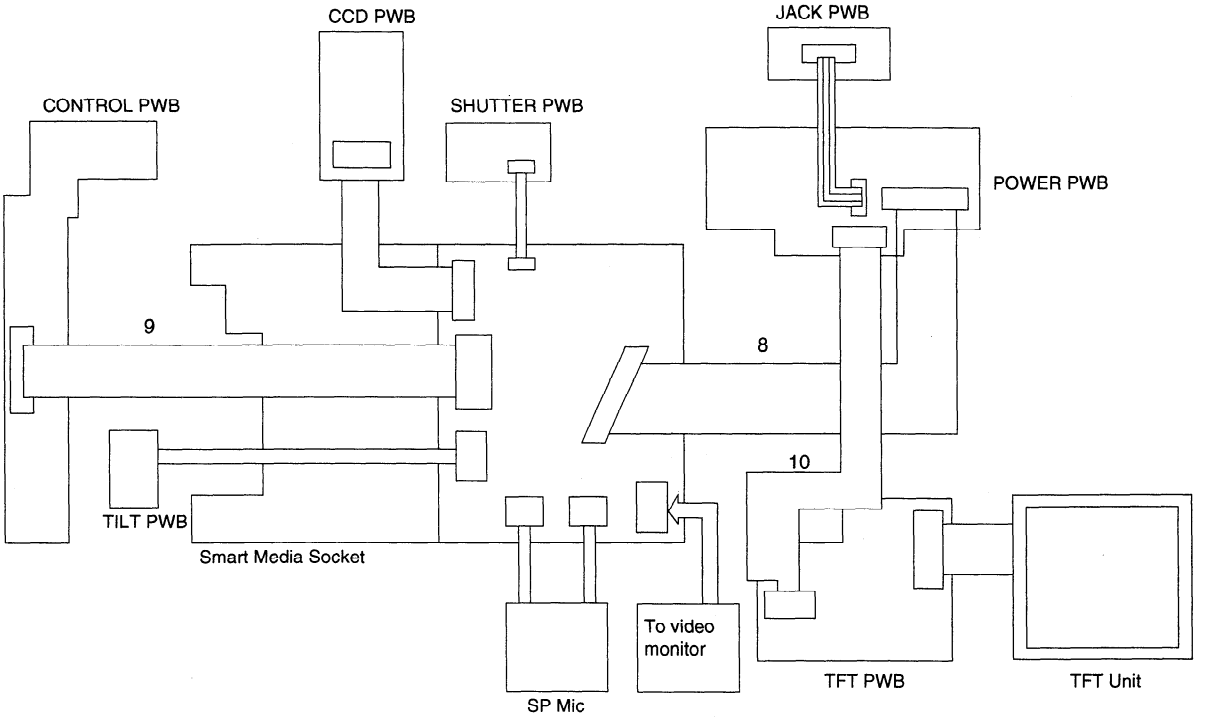
4) Insert the macro ring fixture into the macro adjusting ring.
   Check after adjustment:
   Verify that the object is focused in the range of 45 cm to near the infinite point.
5) Assemble the cabinet. Align the macro switch knob of the cabinet to normal, and make an assembly by inserting the inside switch lever to the notch of the macro adjusting ring.

[Note]:

- Before assembly, verify that the lens and cabinet inside are not stained.
- When assembling the front cabinet of the lens section, the focus switching knob must be positioned at the ordinary shooting position.
- When assembling the front cabinet of the main unit, take care to prevent pinching FPC which is present between CCD PWB and main PWB.

Objects, instruments and jig/tools necessary to serve

• Gray scale chart • Color bar chart • Halogen lamp: 2 pcs.	• Illumination meter • Color temperature meter • Color temperature conversion filter HOYA "LB-165"	• Color video monitor • Extension cables



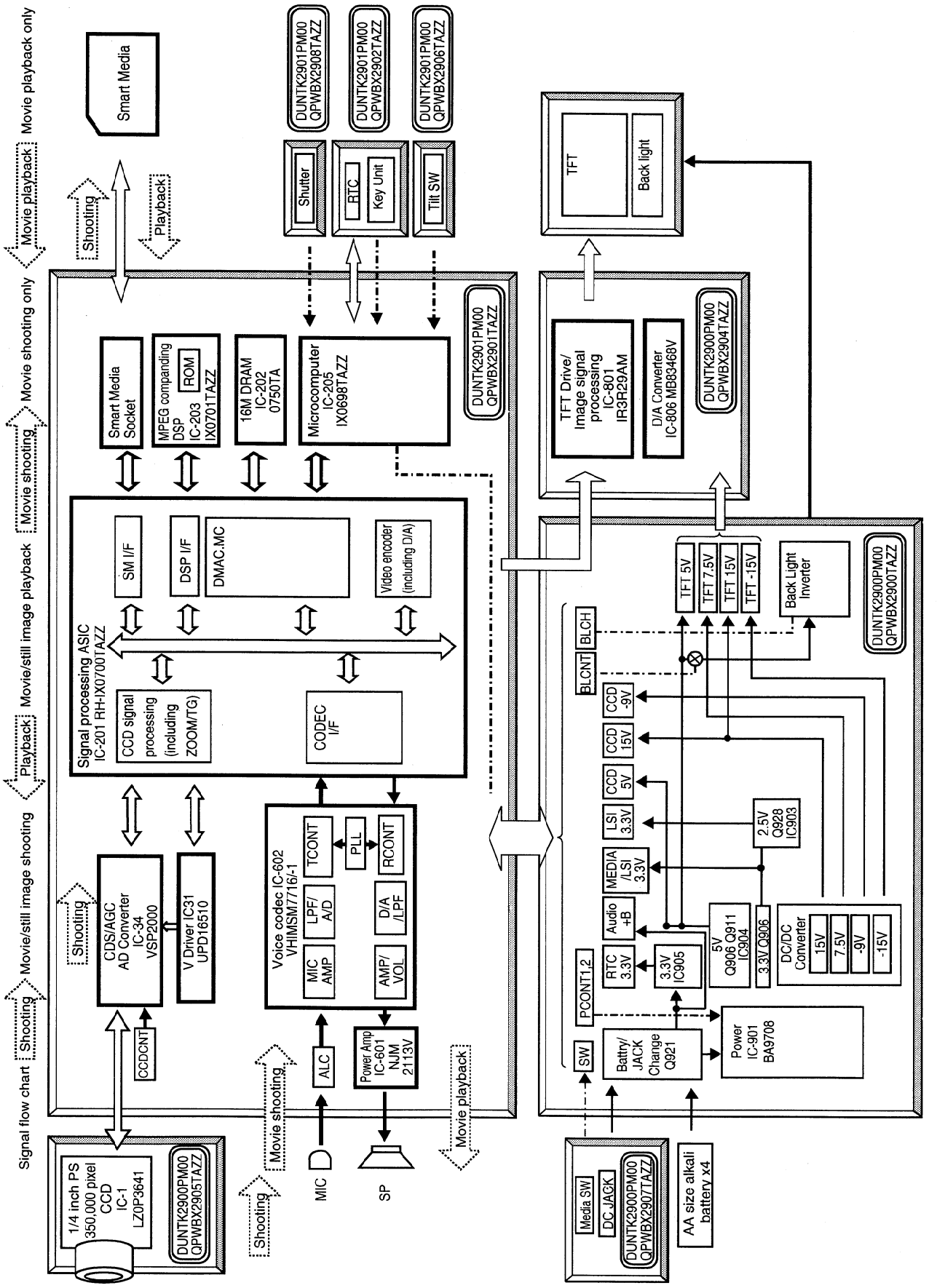
Service of camera section

NO.	Name	Part No.	Code	Configuration	Note
1	Gray Scale Chart (390 x 520 mm)	JiGCHARA-1	CP		
2	Color bar chart (240 x 320 mm)	JiGCHART-4	DA		
3	Illumination meter (0 to 3000 lux)	JiGMETER-1	CT		
4	Color temperature meter (1600 to 400000 degrees K)	JiGMETER-3	FF		
5	Color temperature conversion filter (3200 degrees K ⇒ 6800 degrees K)	JiGHOYA-LB165	BH		
6	Siemens star chart	JiGCHART-11	CE		
7	Torque driver (1.5kg.cm)	JiGTD1500RTDH	CB		
8	MAIN PWB (CN204) — POWER PWB (CN906) 30pin	QCNW-1948TAZZ	BS		
9	MAIN PWB (CN202) — CONTROL PWB (CN2901) 10pin	QCNW-1949TAZZ	AP		
10	POWER PWB (CN907) — TFT PWB (CN803) 13pin	QCNW-1950TAZZ	AP		

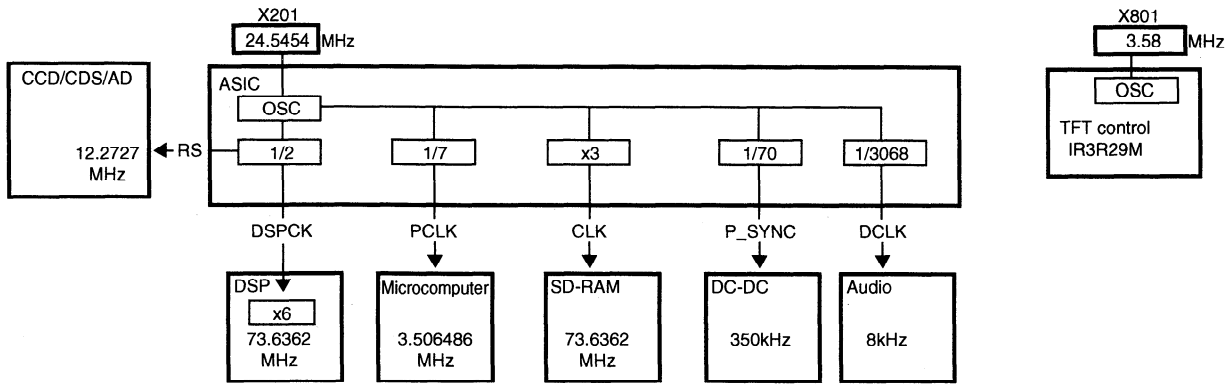
Note:

1. The color temperature conversion filter (jig name No. 5) is available from Hoya Kogaku in your district.

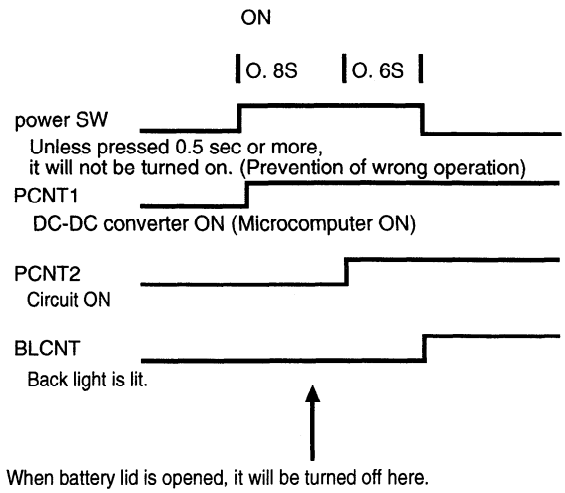
6. BLOCK DIAGRAM



7. OSCILLATOR, DIVIDING AND MULTIPLY MAP



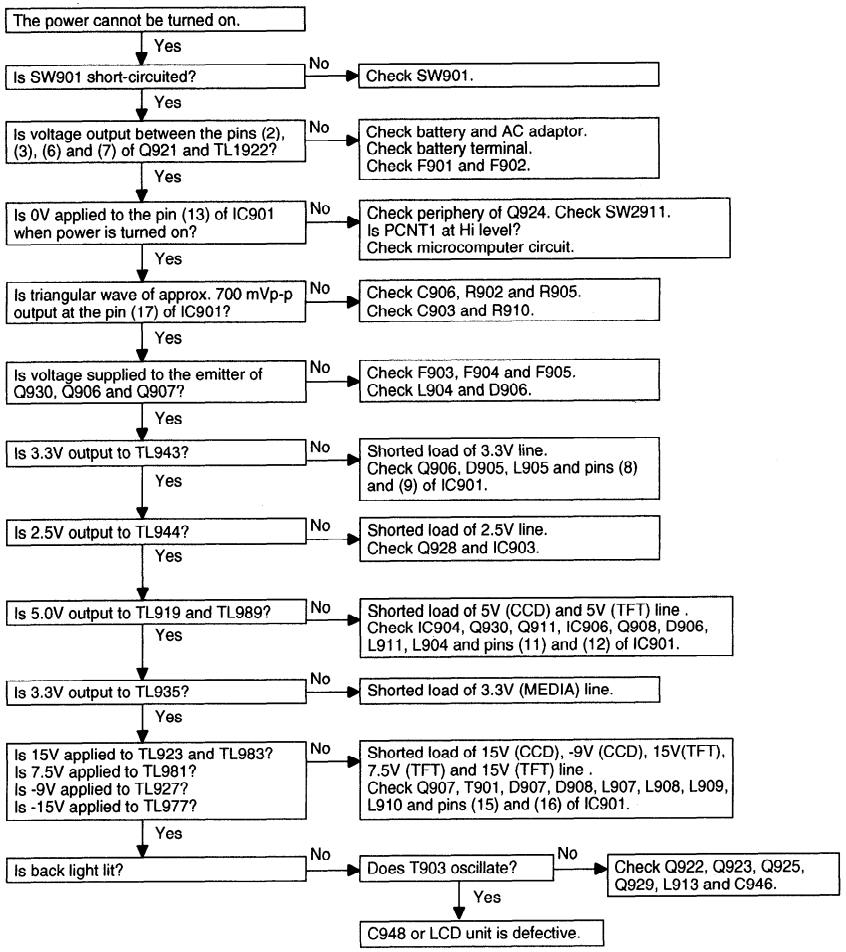
8. POWER CONTROL FLOW



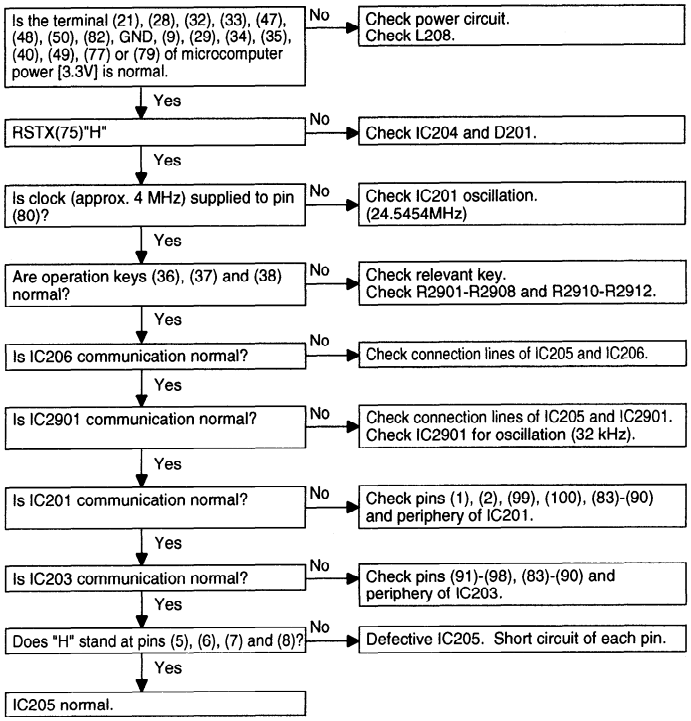
Terminal name	Battery(V)	Measurement terminal	
PCONT1	3.3	CN906-10	TL949
PCONT2	3.3	CN906-13	TL952
BLCNT(normal)	3.3	CN906-30	TL973
+5V (CCD)	5	CN906-1	TL917
+15V (CCD)	15	CN906-2	TL921
-9V (CCD)	-9	CN906-3	TL925
+B (Audio)	6	CN906-4	TL929
+3.3V (MEDIA)	3.3	CN906-5	TL933
+3.3V (RTC)	3.3	CN906-6	TL937
+3.3V(LSI)	3.3	CN906-7	TL941
+2.5V (LSI)	2.5	CN906-8	TL944
+2.5V (LSI)	2.5	CN906-9	TL945
-15V (TFT)	-15	CN907-7	TL975
+7.5V (TFT)	7.5	CN907-8	TL979
+15V (TFT)	15	CN907-9	TL983
+5V (TFT)	5	CN907-10	TL987

9. TROUBLESHOOTHING

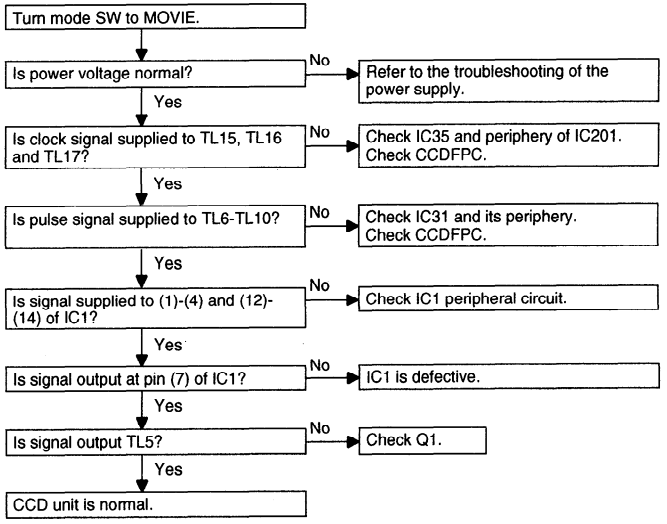
POWER CIRCUIT TROUBLESHOOTHING


The power cannot be turned on.
Yes
Is SW901 short-circuited?
No
Check SW901.
Yes
Is voltage output between the pins (2), (3), (6) and (7) of Q921 and TL1922?
No
Check battery and AC adaptor.
Check battery terminal.
Check F901 and F902.
Yes
Is 0V applied to the pin (13) of IC901 when power is turned on?
No
Check periphery of Q924. Check SW2911.
Is PCNT1 at Hi level?
Check microcomputer circuit.
Yes
Is triangular wave of approx. 700 mVp-p output at the pin (17) of IC901?
No
Check C906, R902 and R905.
Check C903 and R910.
Yes
Is voltage supplied to the emitter of Q930, Q906 and Q907?
No
Check F903, F904 and F905.
Check L904 and D906.
Yes
Is 3.3V output to TL943?
No
Shorted load of 3.3V line.
Check Q906, D905, L905 and pins (8) and (9) of IC901.
Yes
Is 2.5V output to TL944?
No
Shorted load of 2.5V line.
Check Q928 and IC903.
Yes
Is 5.0V output to TL919 and TL989?
No
Shorted load of 5V (CCD) and 5V (TFT) line .
Check IC904, Q930, Q911, IC906, Q908, D906, L911, L904 and pins (11) and (12) of IC901.
Yes
Is 3.3V output to TL935?
No
Shorted load of 3.3V (MEDIA) line.
Yes
Is 15V applied to TL923 and TL983?
Is 7.5V applied to TL981?
Is -9V applied to TL927?
Is -15V applied to TL977?
No
Shorted load of 15V (CCD), -9V (CCD), 15V(TFT), 7.5V (TFT) and 15V (TFT) line .
Check Q907, T901, D907, D908, L907, L908, L909, L910 and pins (15) and (16) of IC901.
Yes
Is back light lit?
No
Does T903 oscillate?
No
Check Q922, Q923, Q925, Q929, L913 and C946.
Yes
C948 or LCD unit is defective.

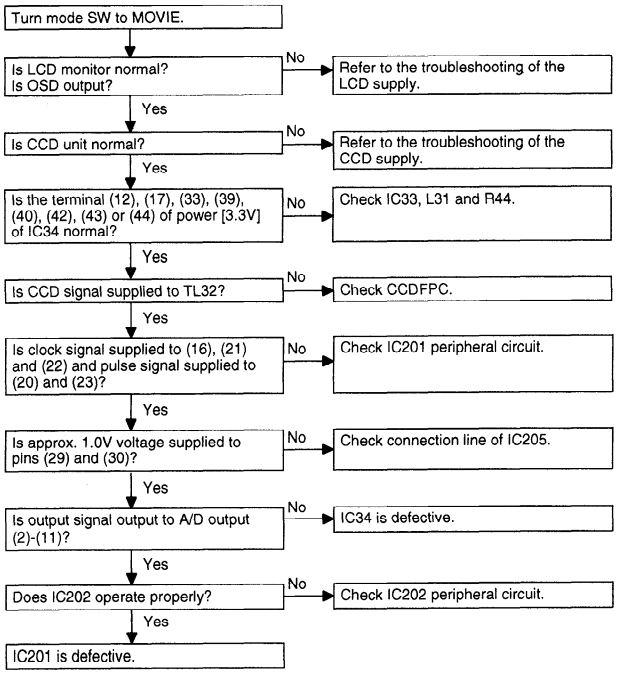
IC205 TROUBLESHOOTHING



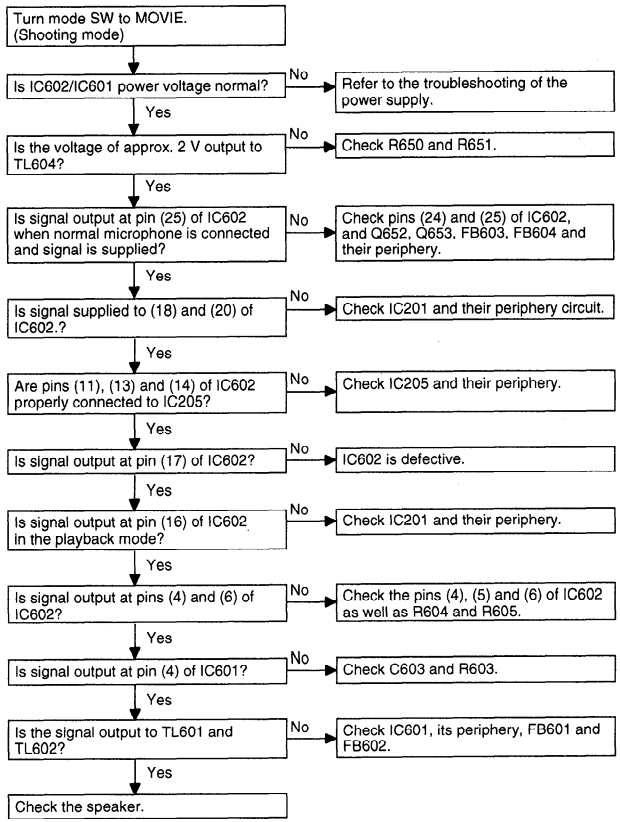
CCD TROUBLESHOOTHING



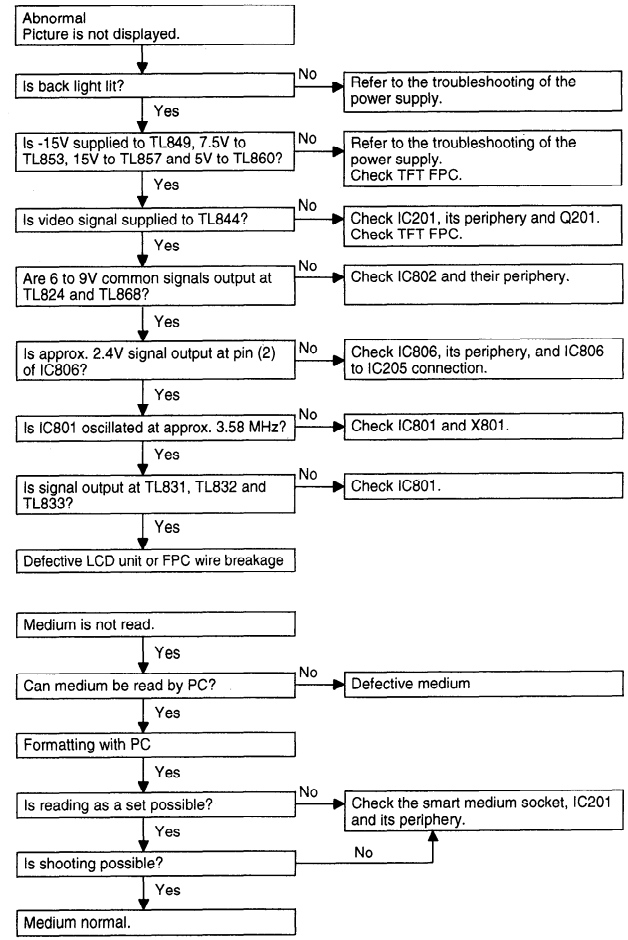
CAMERA TROUBLESHOOTHING


Turn mode SW to MOVIE.
Is LCD monitor normal? Is OSD output?
No
Refer to the troubleshooting of the LCD supply.
Yes
Is CCD unit normal?
No
Refer to the troubleshooting of the CCD supply.
Yes
Is the terminal (12), (17), (33), (39), (40), (42), (43) or (44) of power [3.3V] of IC34 normal?
No
Check IC33, L31 and R44.
Yes
Is CCD signal supplied to TL32?
No
Check CCDFPC.
Yes
Is clock signal supplied to (16), (21) and (22) and pulse signal supplied to (20) and (23)?
No
Check IC201 peripheral circuit.
Yes
Is approx. 1.0V voltage supplied to pins (29) and (30)?
No
Check connection line of IC205.
Yes
Is output signal output to A/D output (2)-(11)?
No
IC34 is defective.
Yes
Does IC202 operate properly?
No
Check IC202 peripheral circuit.
Yes
IC201 is defective.

AUDIO TROUBLESHOOTHING


Turn mode SW to MOVIE. (Shooting mode)
Is IC602/IC601 power voltage normal?
No
Refer to the troubleshooting of the power supply.
Yes
Is the voltage of approx. 2 V output to TL604?
No
Check R650 and R651.
Yes
Is signal output at pin (25) of IC602 when normal microphone is connected and signal is supplied?
No
Check pins (24) and (25) of IC602, and Q652, Q653, FB603, FB604 and their periphery.
Yes
Is signal supplied to (18) and (20) of IC602.?
No
Check IC201 and their periphery circuit.
Yes
Are pins (11), (13) and (14) of IC602 properly connected to IC205?
No
Check IC205 and their periphery.
Yes
Is signal output at pin (17) of IC602?
No
IC602 is defective.
Yes
Is signal output at pin (16) of IC602 in the playback mode?
No
Check IC201 and their periphery.
Yes
Is signal output at pins (4) and (6) of IC602?
No
Check the pins (4), (5) and (6) of IC602 as well as R604 and R605.
Yes
Is signal output at pin (4) of IC601?
No
Check C603 and R603.
Yes
Is the signal output to TL601 and TL602?
No
Check IC601, its periphery, FB601 and FB602.
Yes
Check the speaker.

LCD TROUBLESHOOTHING

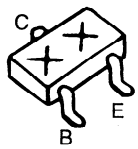


10. IC FUNCTION LIST (IC205:IX0698TA)

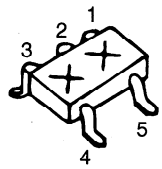
Micom Pin No.	Micom Port Name	I/O	Signal Name	RST	ACT	Function/Connection block
1	P22	O	PRD			VCAM
2	P23	I	PBUSY			VCAM
3	P24	O	DSPRESET	L	H	DSP reset output
4	P25	O	CCDCNT	L	H	CCD power circuit
5	P26	O	PCNT1	L	H	Power circuit
6	P27	O	PCNT2	L	H	Power circuit
7	P30	O	BLCNT	H	L	TFT back light power
8	P31	I	PWMODE		L	Power SW detection (Low)
9	VSS	—				
10	P32	I	LENSSW			Lens direction detection (Low: Playback)
11	P33	I	TFTINVSW			TFT inversion detection (Low: Reverse)
12	P34	I/O	RTCDA			RTC data input/output
13	P35	O	RTCCL			RTC clock
14	P36	O	PD			Camera circuit power control (Low: Playback)
15	P37	I	SHTR			Shtter input (Low)
16	SIN0	I	SIN			RS232C data input
17	SOT0	O	SOT			RS232C data output
18	P42/SCK0					
19	P43	I/O	EDAT/ESDA			EEPROM
20	P44	O	TFTINVO			TFT inversion setting output (Low: Reverse)
21	VCC					
22	P45	O	ESHIFT/ESCL			EEPROM
23	P46	I	ACDTCT			AC adaptor detection
24	P47	O				Open drain output
25	P70/SDA					Open drain output
26	P71/SDA					Open drain output
27	P72					Open drain output
28	DVRH					DA converter external reference power terminal
29	DVSS					DA converter power terminal
30	DA0	O	AGC1			Camera circuit
31	DA1	O	AGC2			Camera circuit
32	AVCC					AD converter power terminal
33	AVRH					AD converter external reference power terminal
34	AVRL					AD converter external reference power terminal
35	AVSS					AD converter power terminal
36	AN0	I	KEY1			Operation unit
37	AN1	I	KEY2			Operation unit
38	AN2	I	MODE			Operation unit (Static picture/dynamic picture)
39	AN3	I	BATT			Power voltage detection
40	VSS					
41	AN4	I	PWERR			Power short circuit detection
42	AN5	I	TEMP			Temperature detection
43	AN6					
44	P57/AN7					
45	IRQ0	I	PINT			VCAM
46	P81/IRQ1					
47	MD0	I	MD0			H:Single chip operation mode specification
48	MD1	I	MD1			H:Single chip operation mode specification
49	MD2	I	MD2			L:Single chip operation mode specification
50	TEST	I				H fixed
51	P82/IRQ2	O				
52	P83/IRQ3					
53	P84	O	BLCH			TFT brightness switch (Low: Dark)
54	P85	O				
55	P86/OUT3					
56	NC					Open terminal
57	P60	O	DEN			AUDIO codex (DataEnable)
58	P61	O	CDIN			AUDIO codex (ContolDataIn)

Micom Pin No.	Micom Port Name	I/O	Signal Name	RST	ACT	Function/Connection block
59	P62	O	DCLK			AUDIO codex (DataShift)
60	PPG00	O	BEEP			AUDIO codex (PWI)
61	P64	O	PDN			AUDIO codex (PowerDown)
62	P65	O	DSPP0			DSP boot selection
63	P66	O	DSPP1			DSP boot selection
64	P67					
65	P90	I	CD			SSFDC
66	P91	I	LVD			SSFDC
67	P92	O	PRTCTO	L	H	SSFDC
68	P93	I	MEDIA			Lid open detection (High : OPEN)
69	P94	I	PRTCTI			SSFDC soket (Low : protect)
70	P95/ZIN1	O	XRST			Reset output (VCAM)
71	P96/IN0	O	TFTXRST			TFT reset output
72	P97/IN1					
73	PA0	O	DADI			DA converter data
74	PA1	O	DACK			DA converter clock
75	RSTX	I				Reset input terminal
76	PA2	O	DALD			DA converter road
77	X0A	I				
78	X1A	I				
79	VSS					
80	X0	I				(24.5454 ÷ 7MHz) Clock input terminal
81	X1	I				
82	VCC					
83	P00	I/O	DB0			DSP/VCAM data bus
84	P01	I/O	DB1			DSP/VCAM data bus
85	P02	I/O	DB2			DSP/VCAM data bus
86	P03	I/O	DB3			DSP/VCAM data bus
87	P04	I/O	DB4			DSP/VCAM data bus
88	P05	I/O	DB5			DSP/VCAM data bus
89	P06	I/O	DB6			DSP/VCAM data bus
90	P07	I/O	DB7			DSP/VCAM data bus
91	P10	O	DSPHCS			DSP
92	P11	O	DSPHA0			DSP
93	P12	O	DSPHA1			DSP
94	P13	O	DSPHRD			DSP
95	P14	I	DSPHRE			DSP
96	P15	O	DSPHWR			DSP
97	P16	I	DSPHWE			DSP
98	P17	O	DSPHINT4			DSP
99	P20	O	PADREN			VCAM
100	P21	O	PWR			VCAM

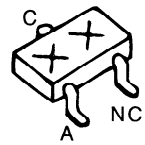
11. SEMICONDUCTOR LEAD IDENTIFICATION



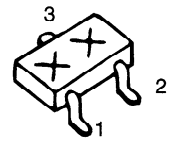
2SC-2404-C
2SC4081R
DTC144EE
2SA1362GR
DTC114YE
DTC115EUA
2SC4213B



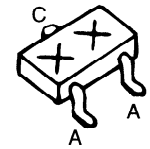
XC62EP25
XC62EP50
TC7SH04U



RB451F

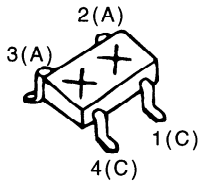


XC62FP33

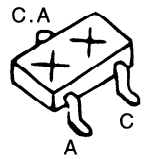


DAN222

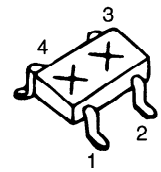
2SA1314C
2SB1121T
2SD874A-R1E
2SK2316



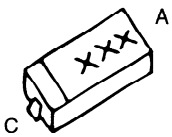
DA227



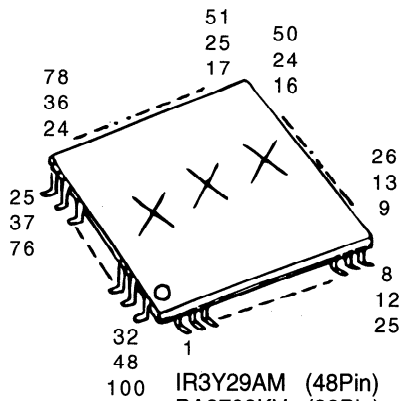
DA221



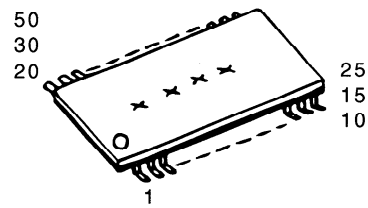
S80827LN



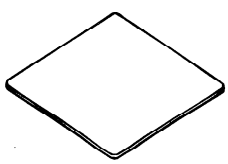
1SS368
HVU359TR
F1AJ3
F1J2F
SI6463DQ



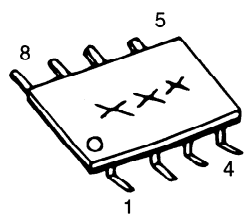
IR3Y29AM (48Pin)
BA9708KV (32Pin)
VSP2000 (48Pin)
IX0701TA (100Pin)
IX0698TA (100pin)



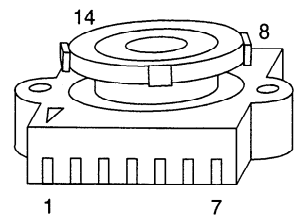
IX0750TA (50Pin)
MB8346B (20Pin)
MSM7716 (30Pin)
MPD1650 (20Pin)



IX0700TA (176pin)

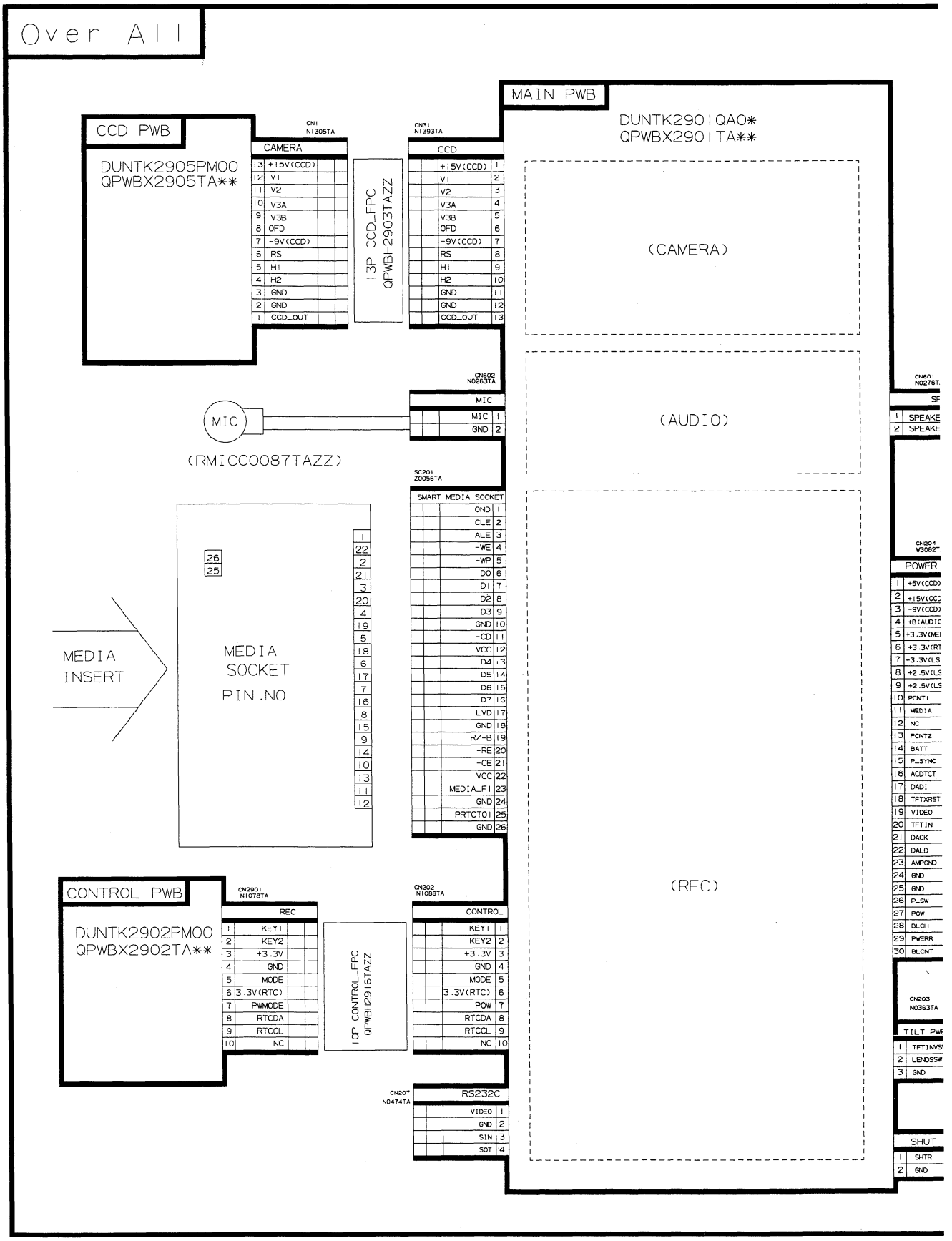


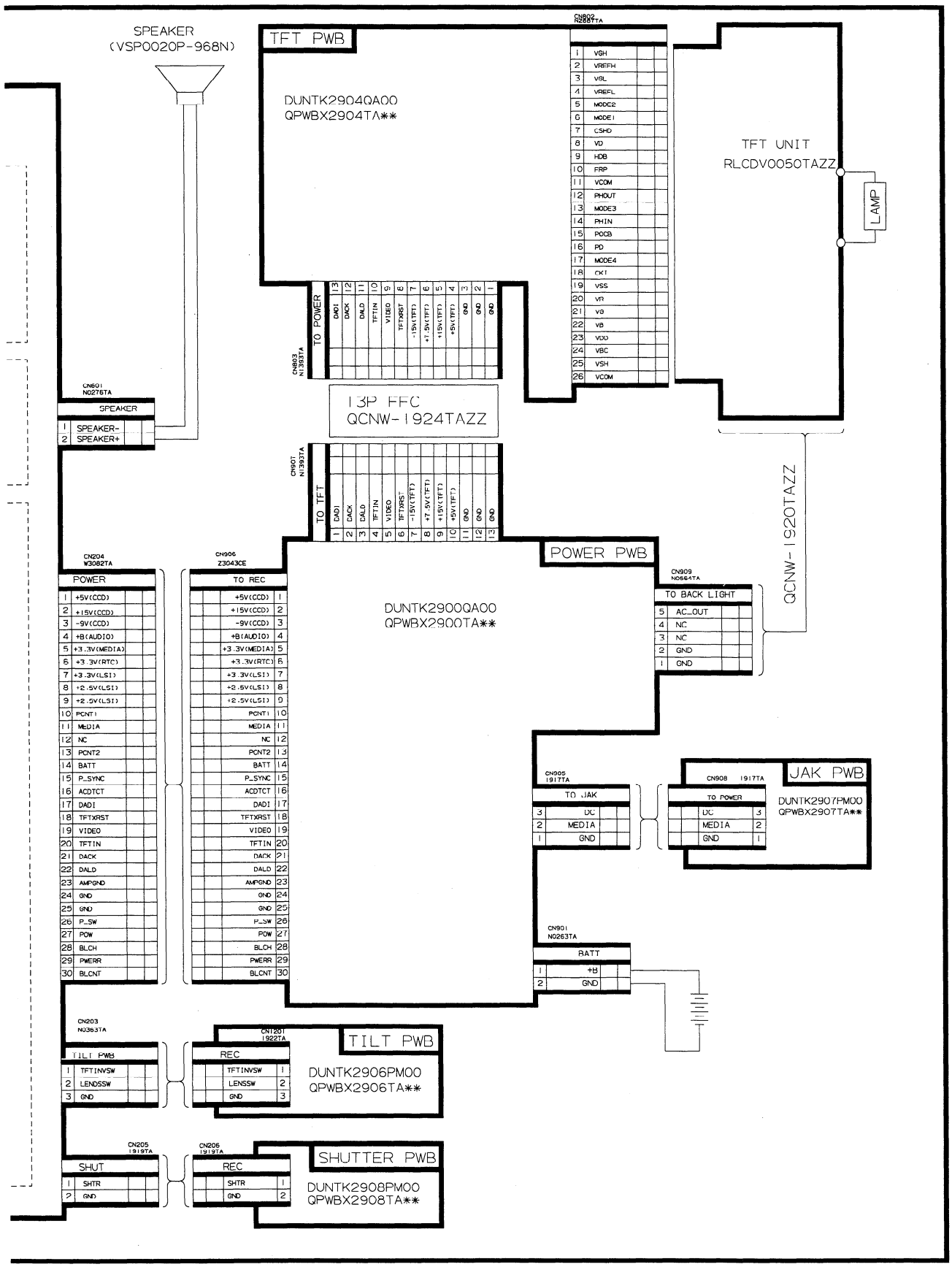
S3530A
NJM4565V
TC7W14U
SI6463DQ
NJM2113V
TC7WH04U
S24C04A



LEOP3641

12. WIRING DIAGRAM

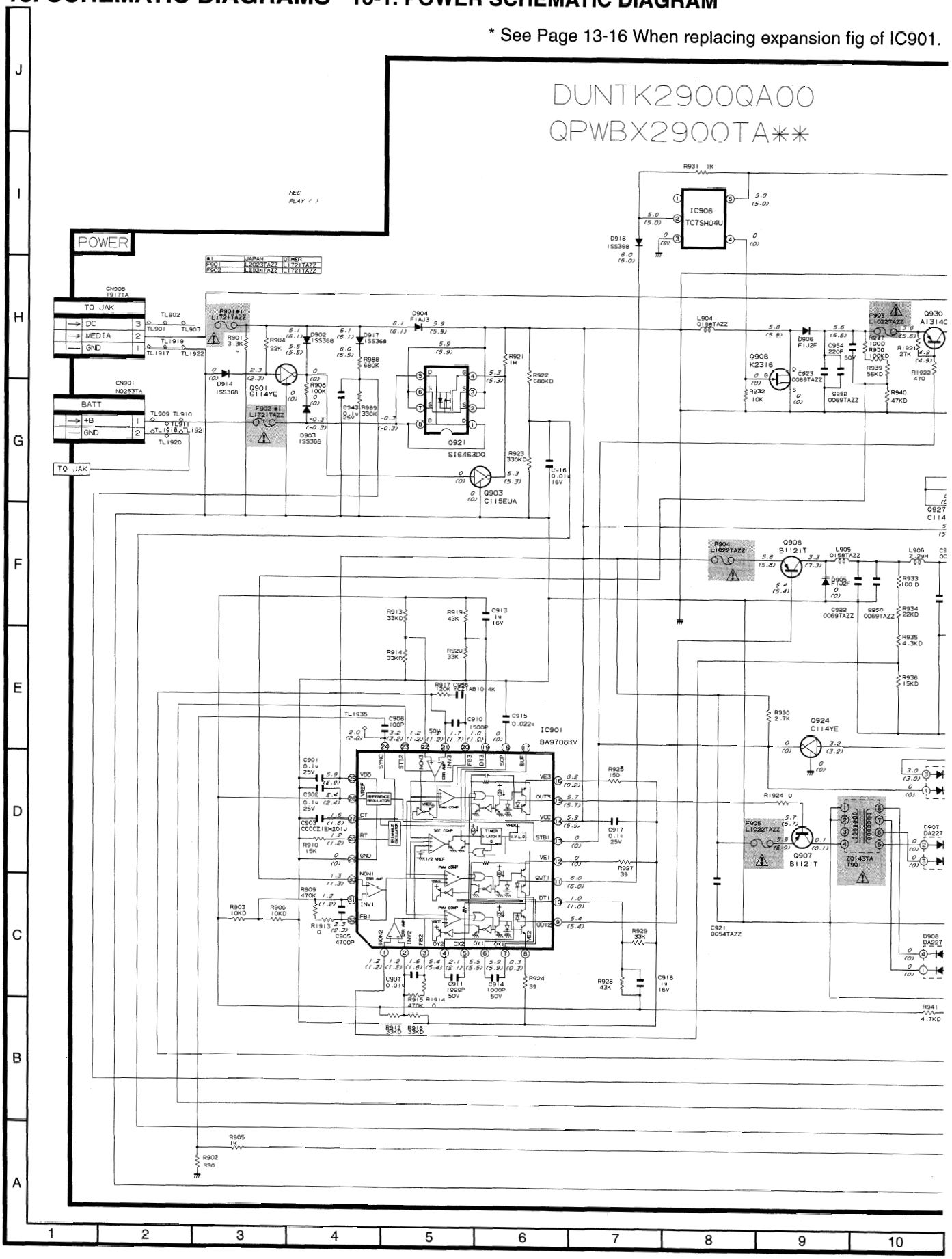



SPEAKER
(VSP0020P-968N)
TFT PWB
DUNTK2904QA00
QPWBX2904TA**
CN802
N2887TA
1 VGH
2 VREFH
3 VGL
4 VREFL
5 MODE2
6 MODE1
7 CSHD
8 VD
9 HDB
10 FRP
11 VCOM
12 PHOUT
13 MODE3
14 PHIN
15 POCB
16 PD
17 MODE4
18 CK1
19 VSS
20 VR
21 VG
22 VB
23 VDD
24 VBC
25 VSH
26 VCOM
TFT UNIT
RLCDV0050TAZZ
LAMP
CN903
N1393TA
TO POWER
13 DADI
12 DACK
11 DALD
10 TFTIN
9 VIDEO
8 TFTXRST
7 -15V(TFT)
6 +7.5V(TFT)
5 +15V(TFT)
4 +5V(TFT)
3 GND
2 GND
1 GND
13P FFC
QCNW-1924TAZZ
CN907
N1393TA
TO TFT
1 DADI
2 DACK
3 DALD
4 TFTIN
5 VIDEO
6 TFTXRST
7 -15V(TFT)
8 +7.5V(TFT)
9 +15V(TFT)
10 +5V(TFT)
11 GND
12 GND
13 GND
QCNW-1920TAZZ
CN901
N0276TA
SPEAKER
1 SPEAKER-
2 SPEAKER+
CN204
W3082TA
POWER
1 +5V(CCD)
2 +15V(CCD)
3 -9V(CCD)
4 +B(AUDIO)
5 +3.3V(MEDIA)
6 +3.3V(RTC)
7 +3.3V(LSI)
8 +2.5V(LSI)
9 +2.5V(LSI)
10 PCNT1
11 MEDIA
12 NC
13 PCNT2
14 BATT
15 P_SYNC
16 ACDTCT
17 DADI
18 TFTXRST
19 VIDEO
20 TFTIN
21 DACK
22 DALD
23 AMPGND
24 GND
25 GND
26 P_SW
27 POW
28 BLCH
29 PWERR
30 BLCNT
CN906
Z3043CE
TO REC
+5V(CCD) 1
+15V(CCD) 2
-9V(CCD) 3
+B(AUDIO) 4
+3.3V(MEDIA) 5
+3.3V(RTC) 6
+3.3V(LSI) 7
+2.5V(LSI) 8
+2.5V(LSI) 9
PCNT1 10
MEDIA 11
NC 12
PCNT2 13
BATT 14
P_SYNC 15
ACDTCT 16
DADI 17
TFTXRST 18
VIDEO 19
TFTIN 20
DACK 21
DALD 22
AMPGND 23
GND 24
GND 25
P_SW 26
POW 27
BLCH 28
PWERR 29
BLCNT 30
POWER PWB
DUNTK2900QA00
QPWBX2900TA**
CN909
N0564TA
TO BACK LIGHT
5 AC_OUT
4 NC
3 NC
2 GND
1 GND
CN905
1917TA
TO JAK
3 DC
2 MEDIA
1 GND
CN908 1917TA
TO POWER
DC 3
MEDIA 2
GND 1
JAK PWB
DUNTK2907PM00
QPWBX2907TA**
CN901
N0263TA
BATT
1 +B
2 GND
CN203
N0363TA
TILT PWB
1 TFTINVSW
2 LENDSSW
3 GND
CN1201
1922TA
REC
TFTINVSW 1
LENSSW 2
GND 3
TILT PWB
DUNTK2906PM00
QPWBX2906TA**
CN205
1919TA
SHUT
1 SHTR
2 GND
CN206
1919TA
REC
SHTR 1
GND 2
SHUTTER PWB
DUNTK2908PM00
QPWBX2908TA**

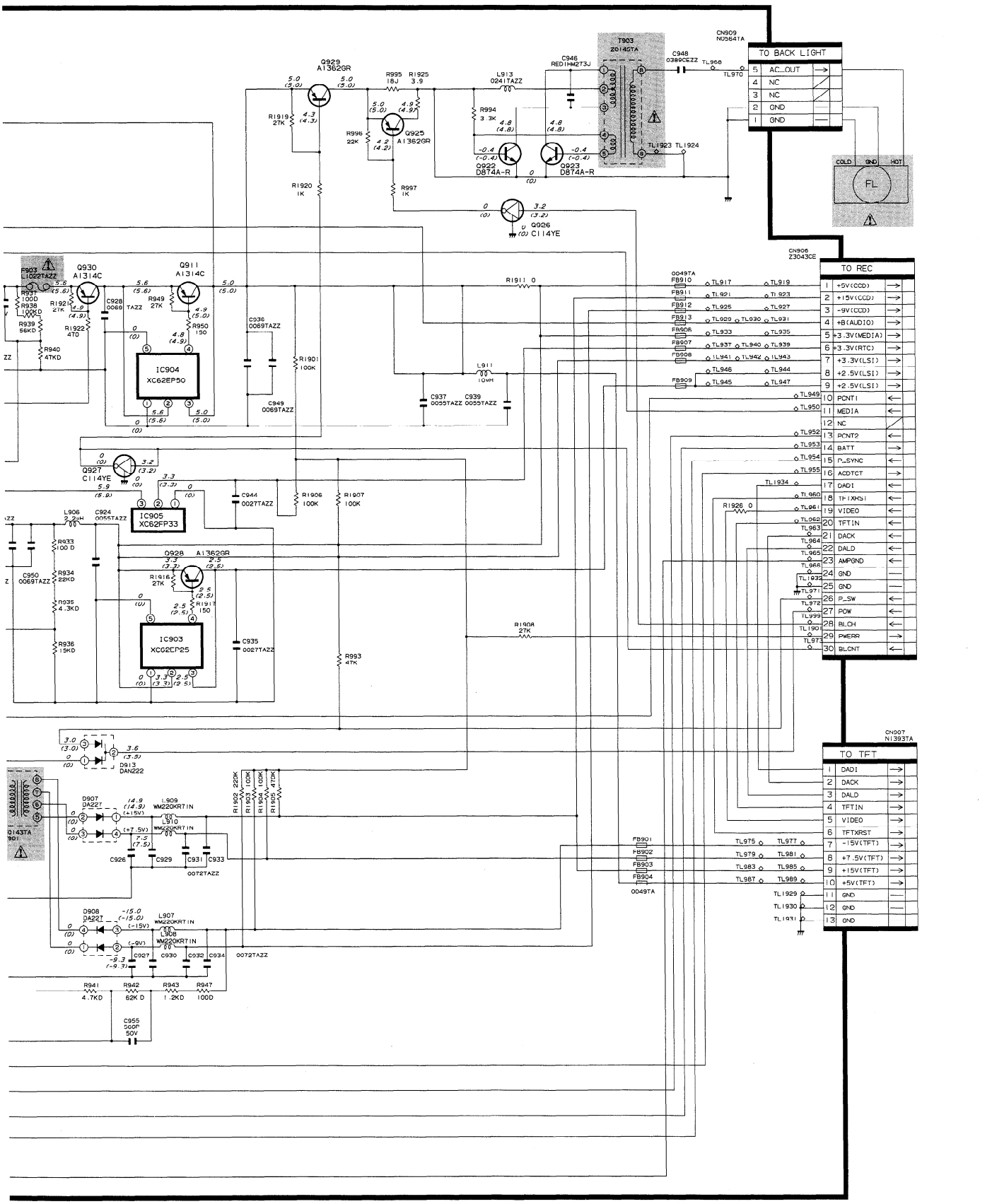
13. SCHEMATIC DIAGRAMS 13-1. POWER SCHEMATIC DIAGRAM

* See Page 13-16 When replacing expansion fig of IC901.

DUNTK2900QA00
QPWBX2900TA**

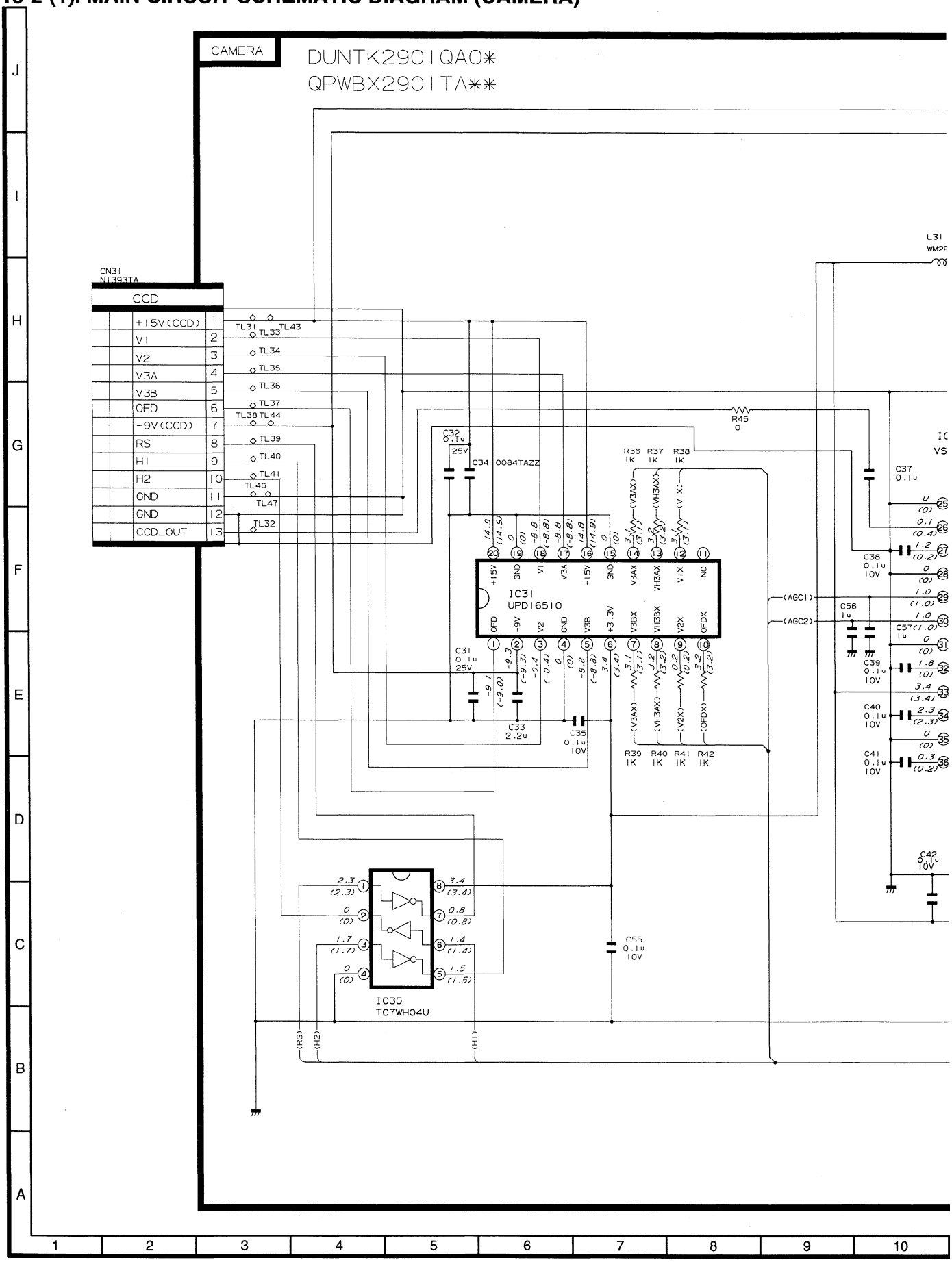


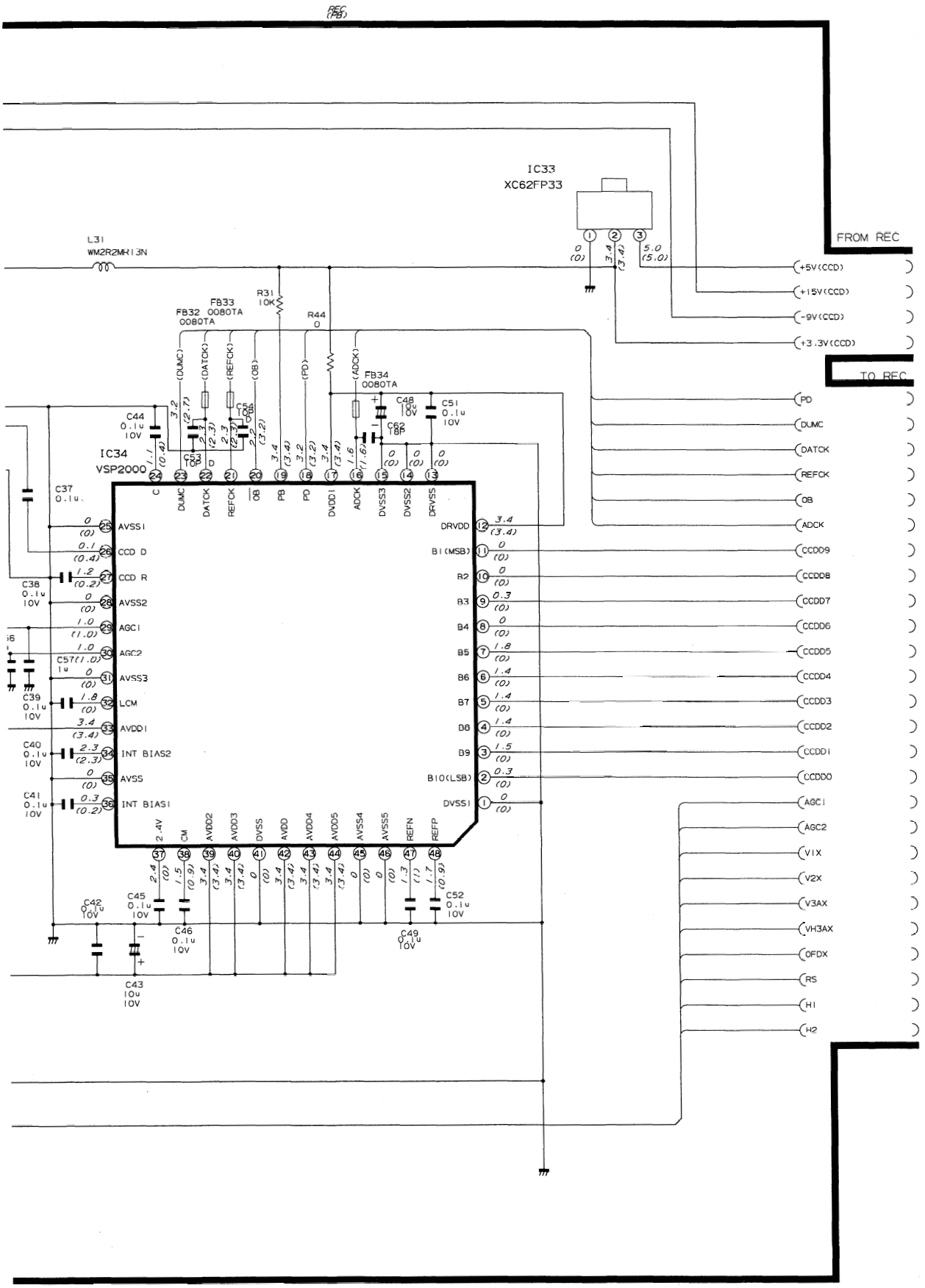
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



10	11	12	13	14	15	16	17	18	19

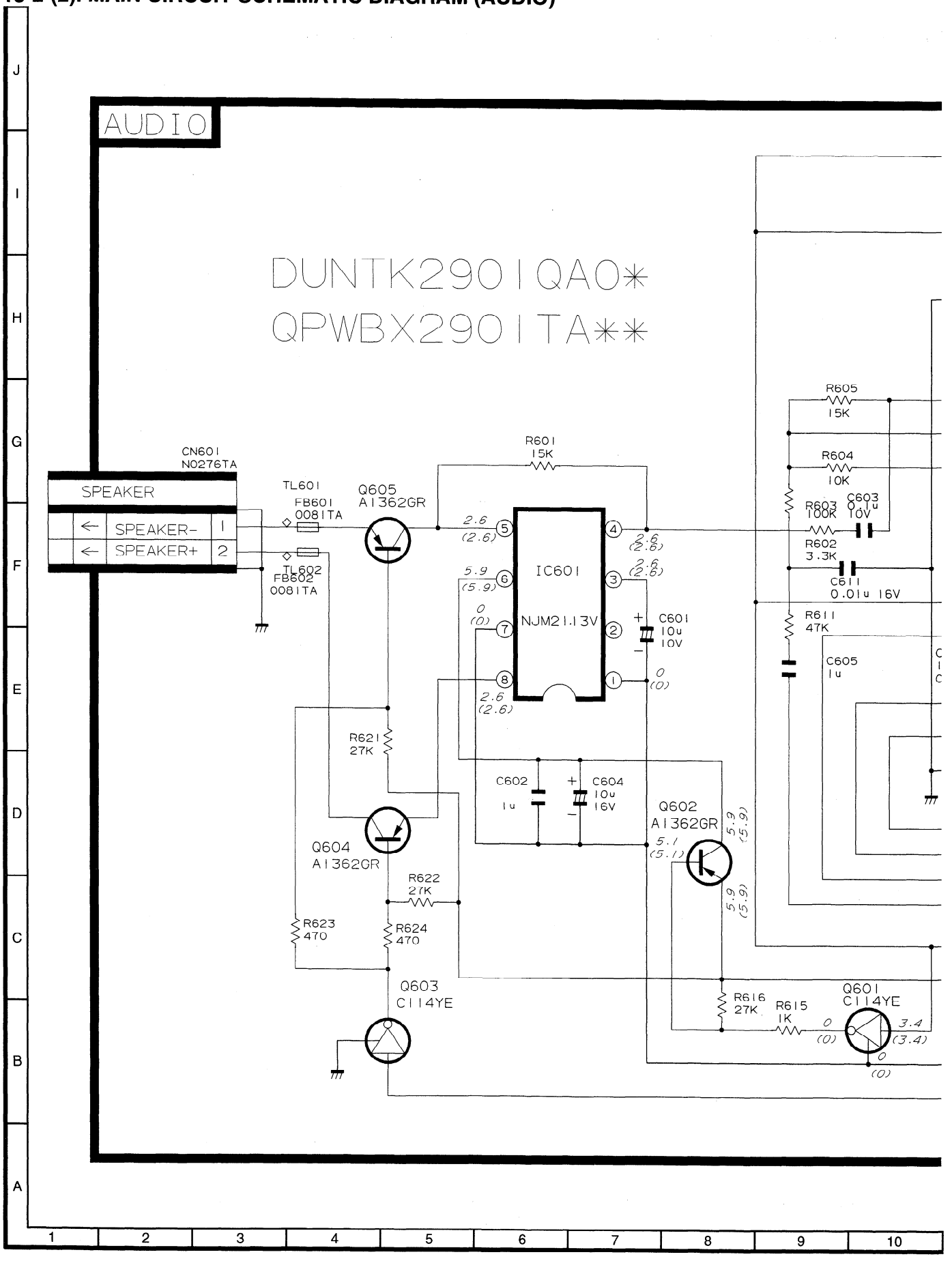
13-2-(1). MAIN CIRCUIT SCHEMATIC DIAGRAM (CAMERA)

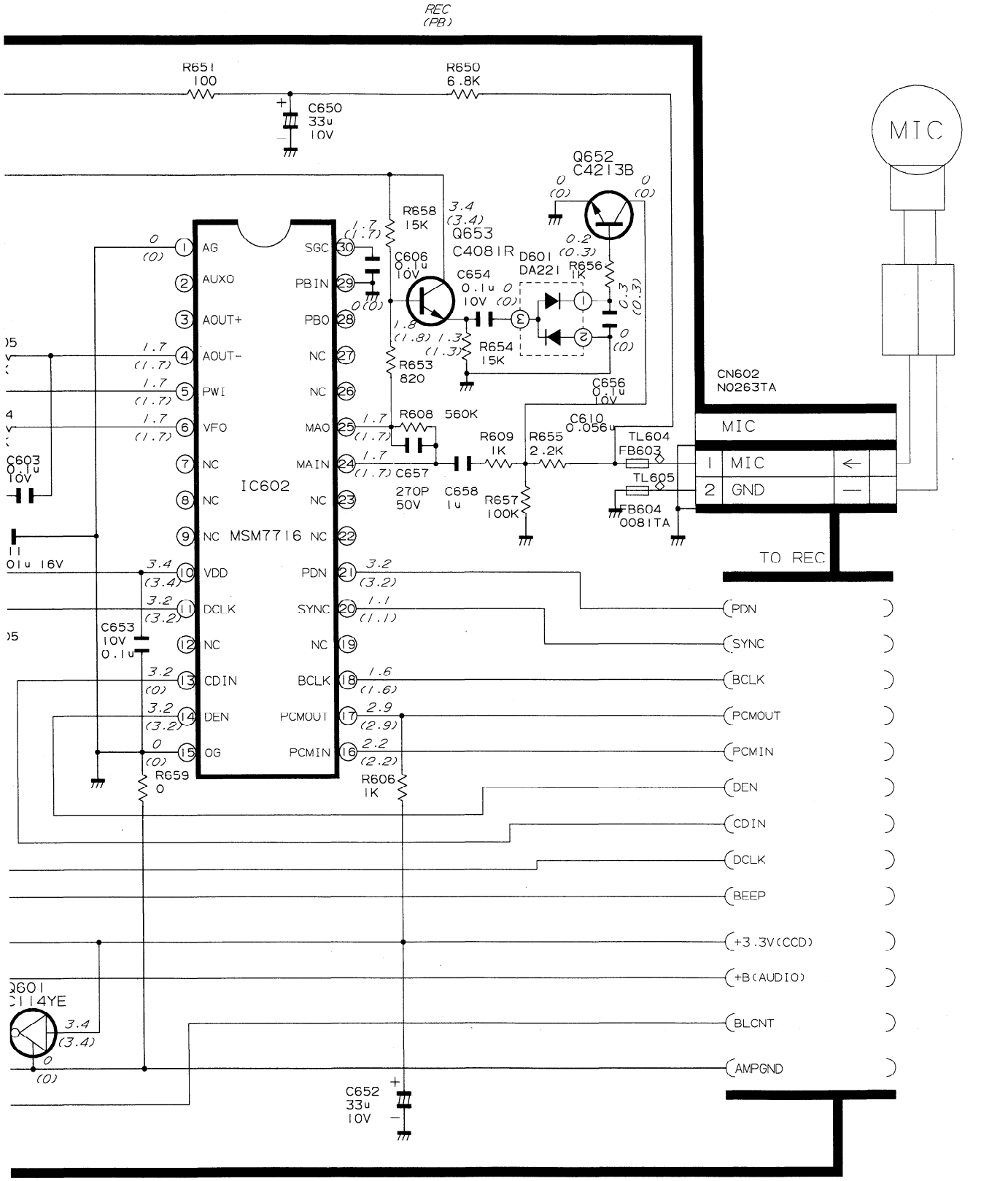




10	11	12	13	14	15	16	17	18	19

13-2-(2). MAIN CIRCUIT SCHEMATIC DIAGRAM (AUDIO)

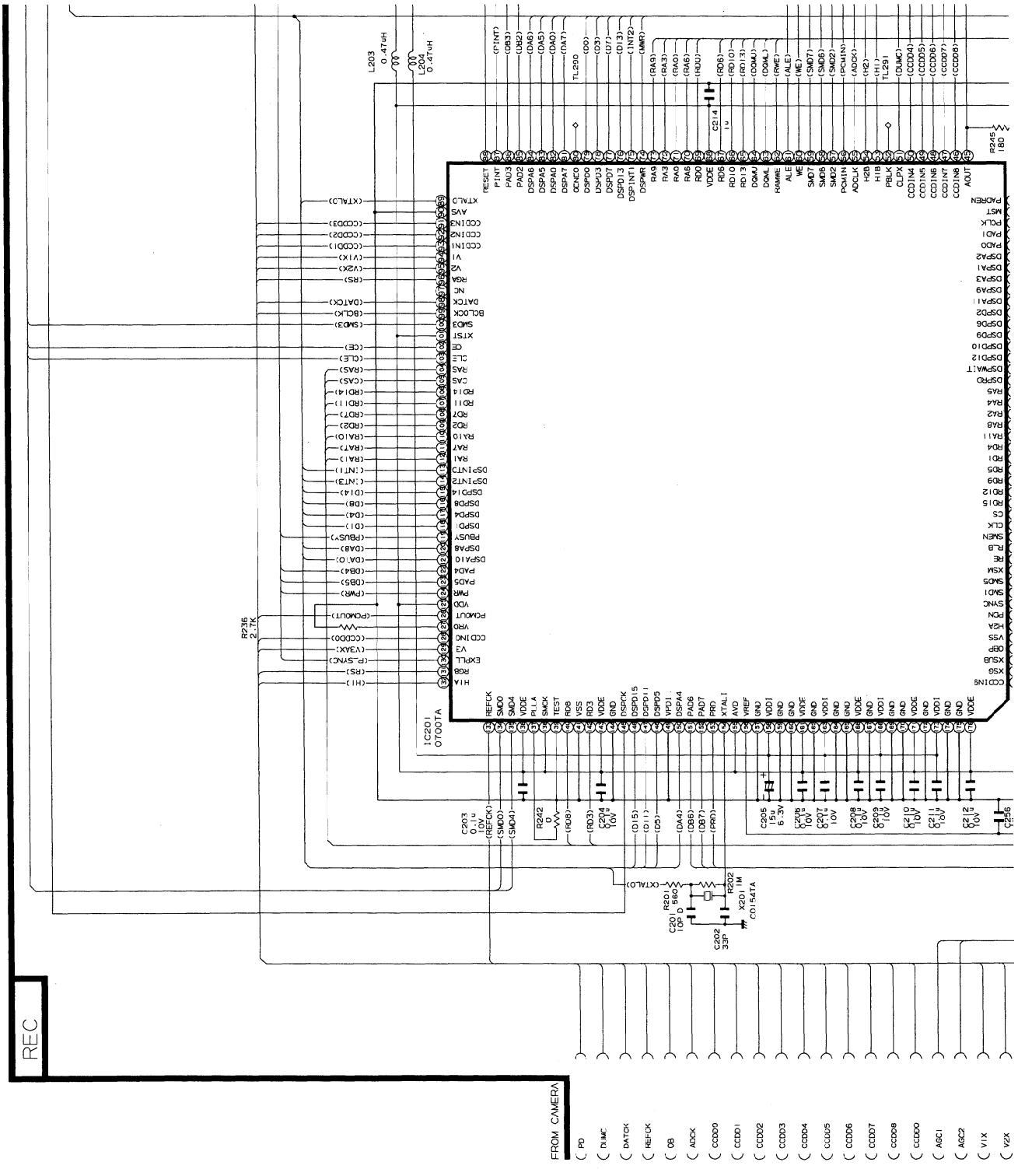




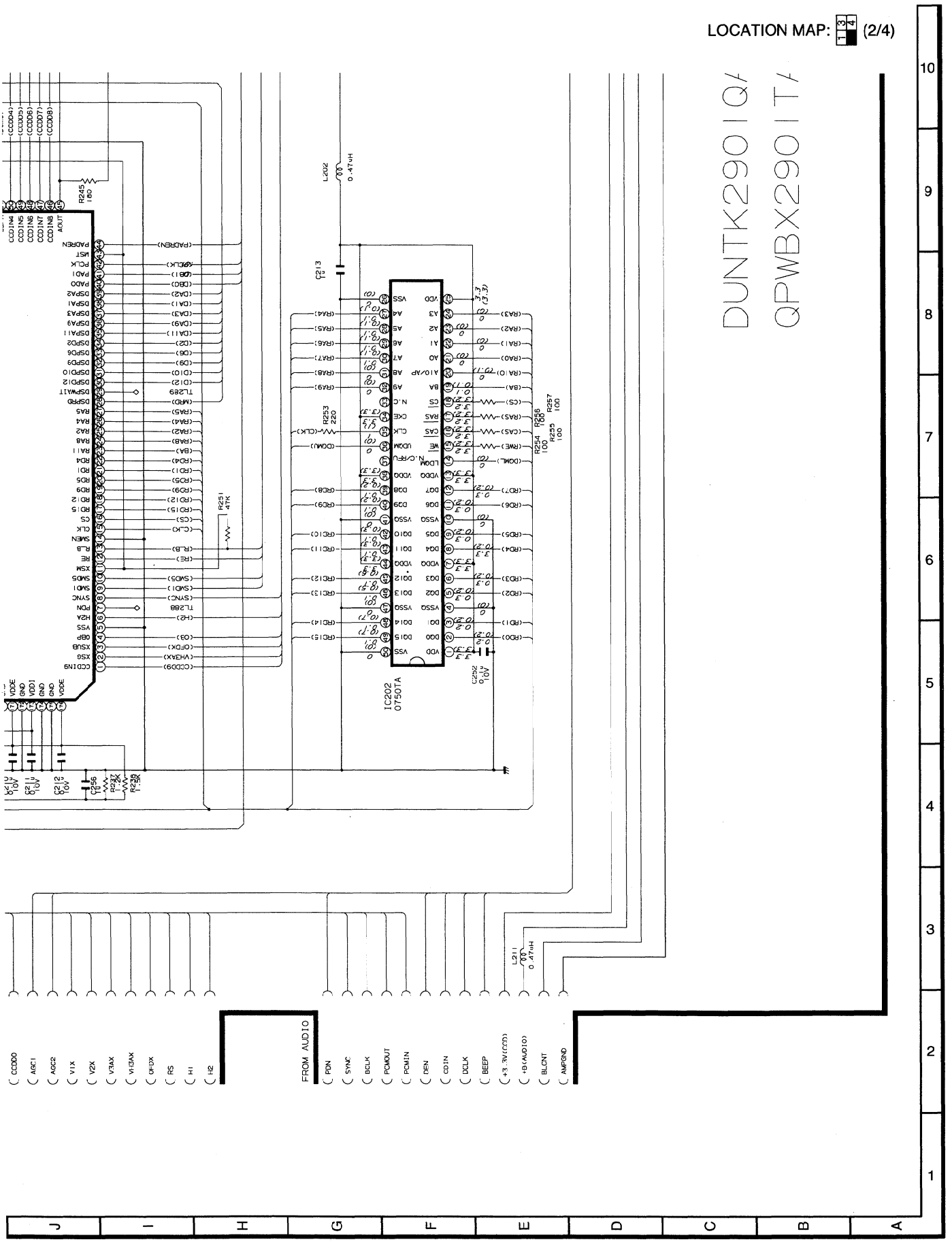
10	11	12	13	14	15	16	17	18	19

13-2-(3). MAIN CIRCUIT SCHEMATIC DIAGRAM (REC)

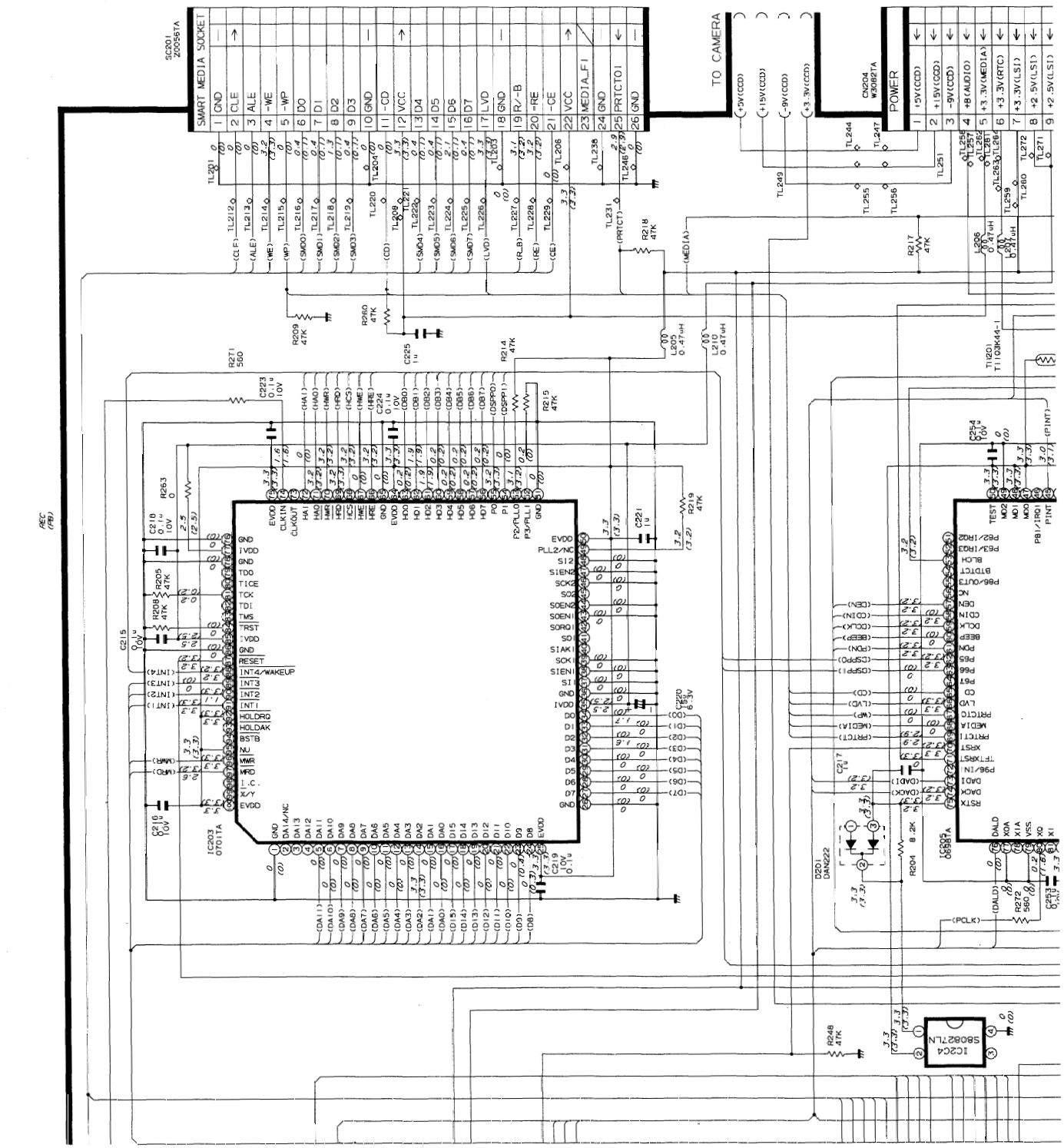
LOCATION MAP: 3 / 2 4 (1/4)



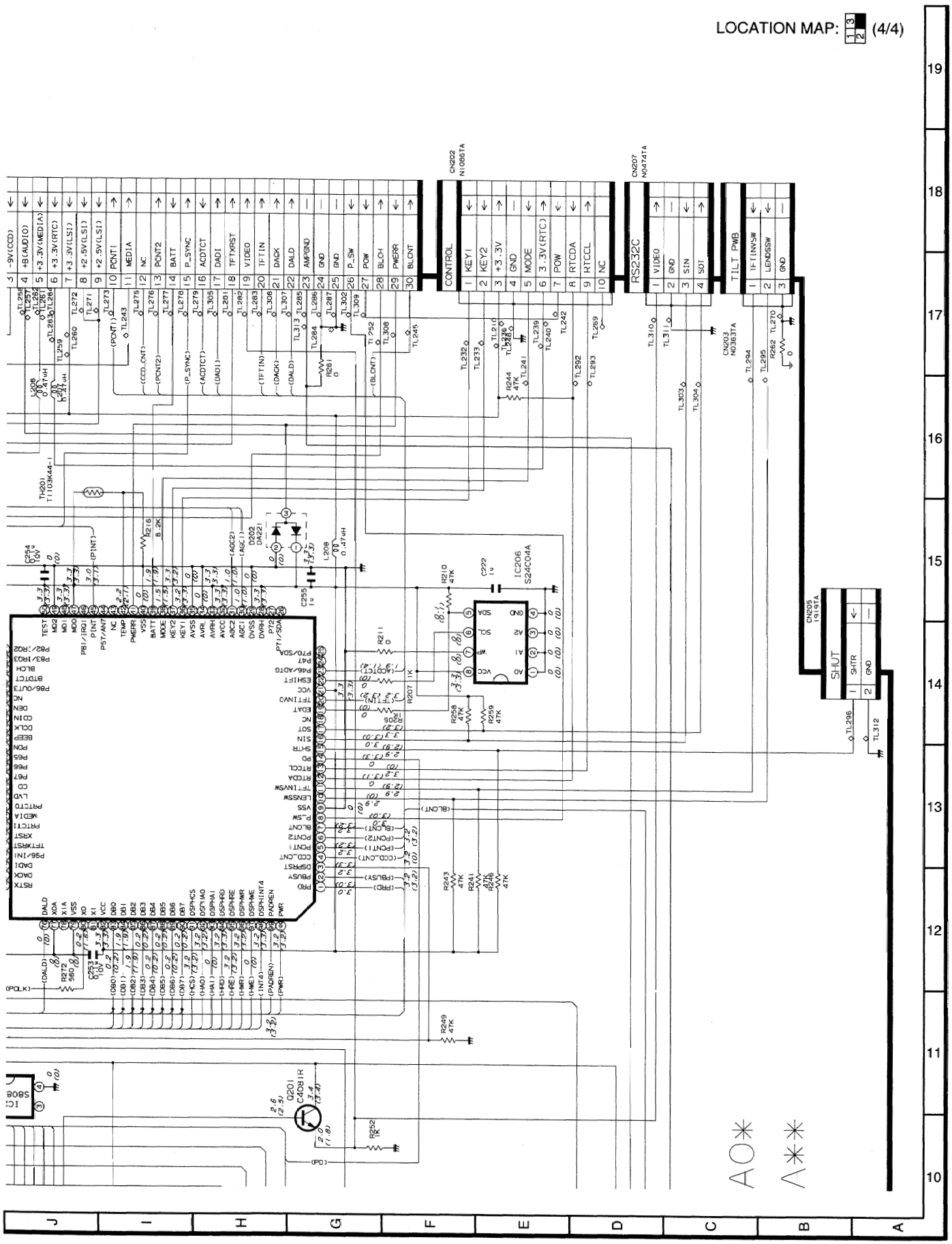
LOCATION MAP: 1 3 4 (2/4)



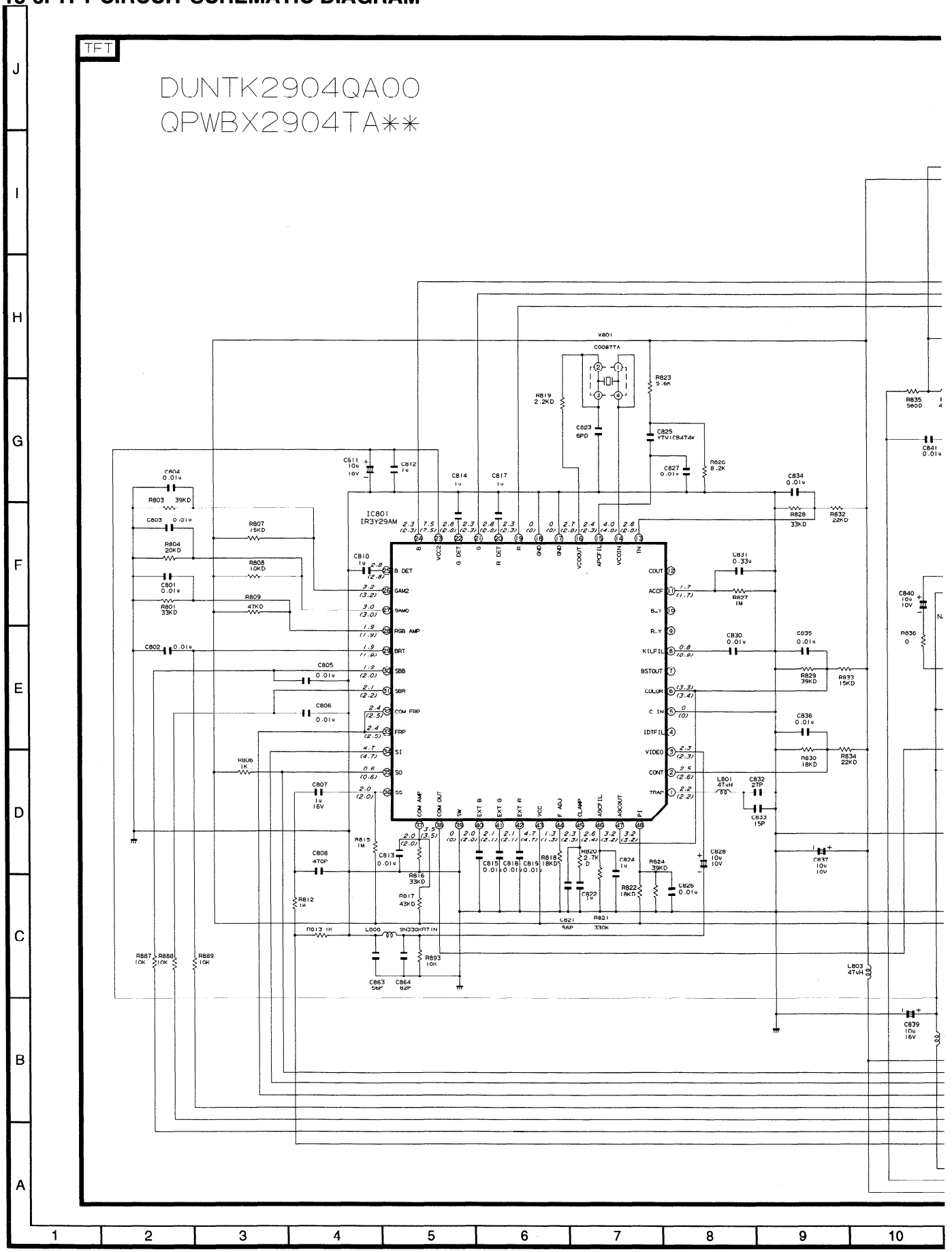
LOCATION MAP: 1 2 4 (3/4)

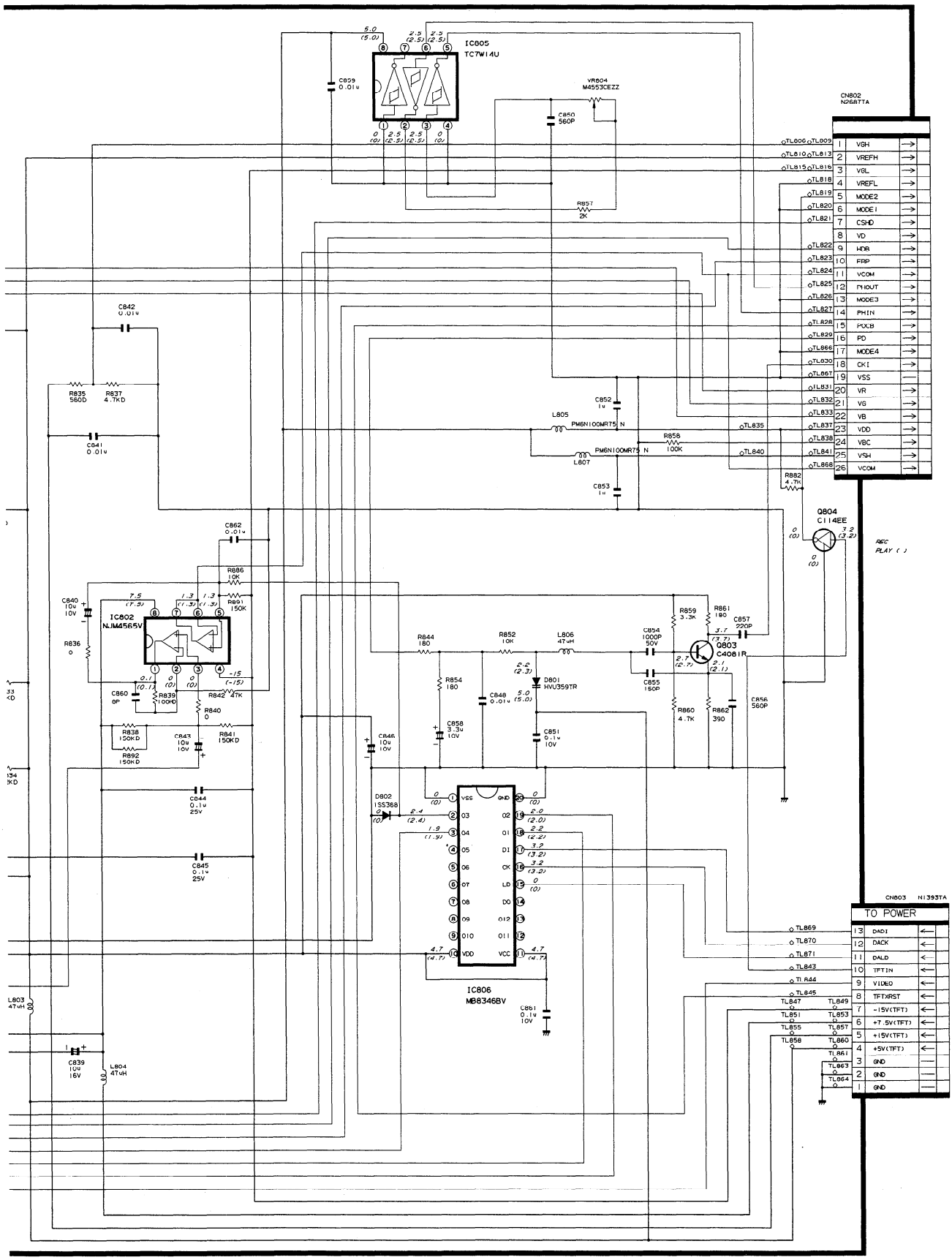


LOCATION MAP: (4/4)



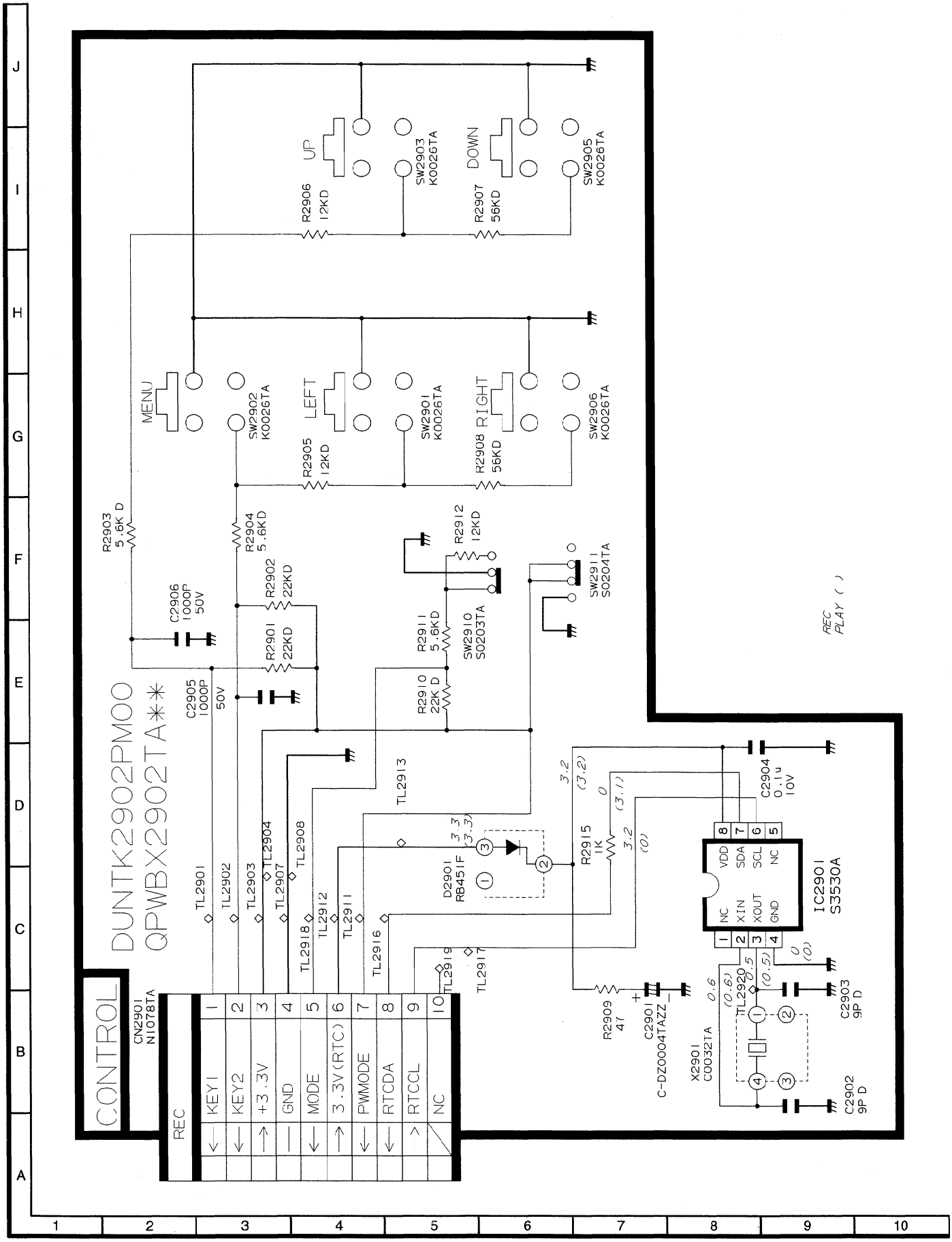
13-3. TFT CIRCUIT SCHEMATIC DIAGRAM



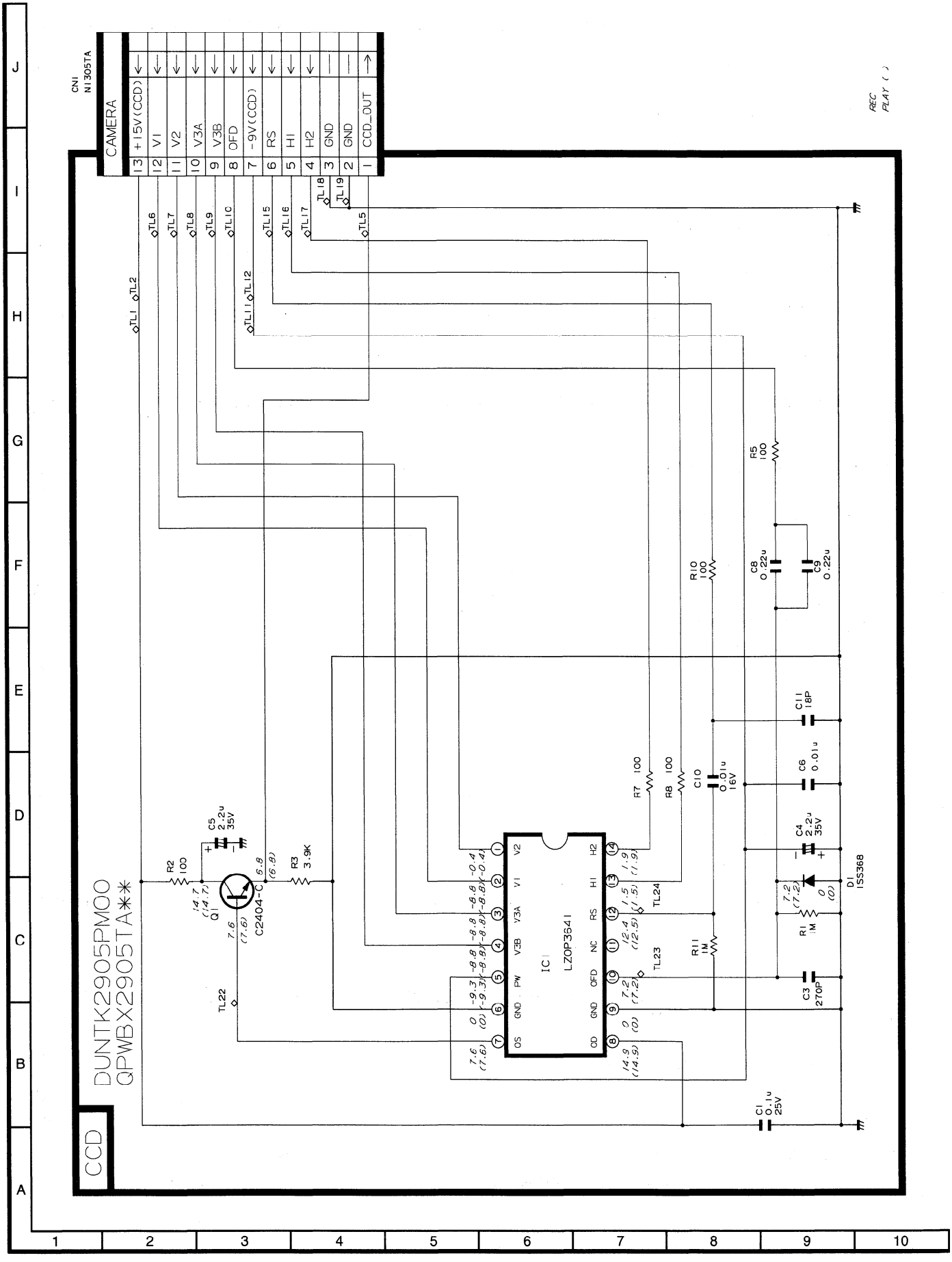


10	11	12	13	14	15	16	17	18	19

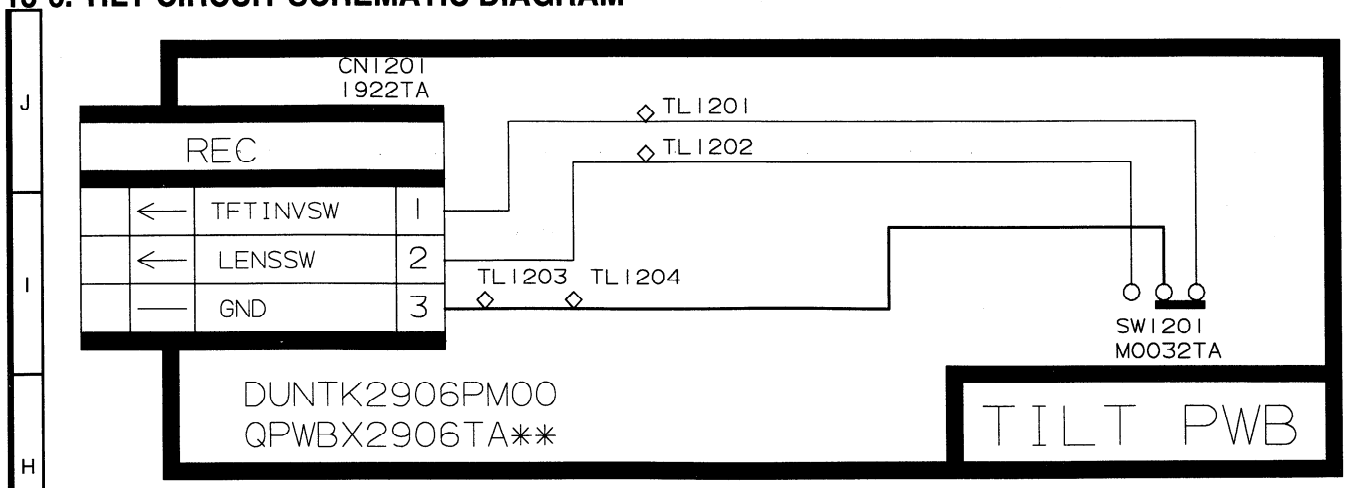
13-4. CONTROL CIRCUIT SCHEMATIC DIAGRAM



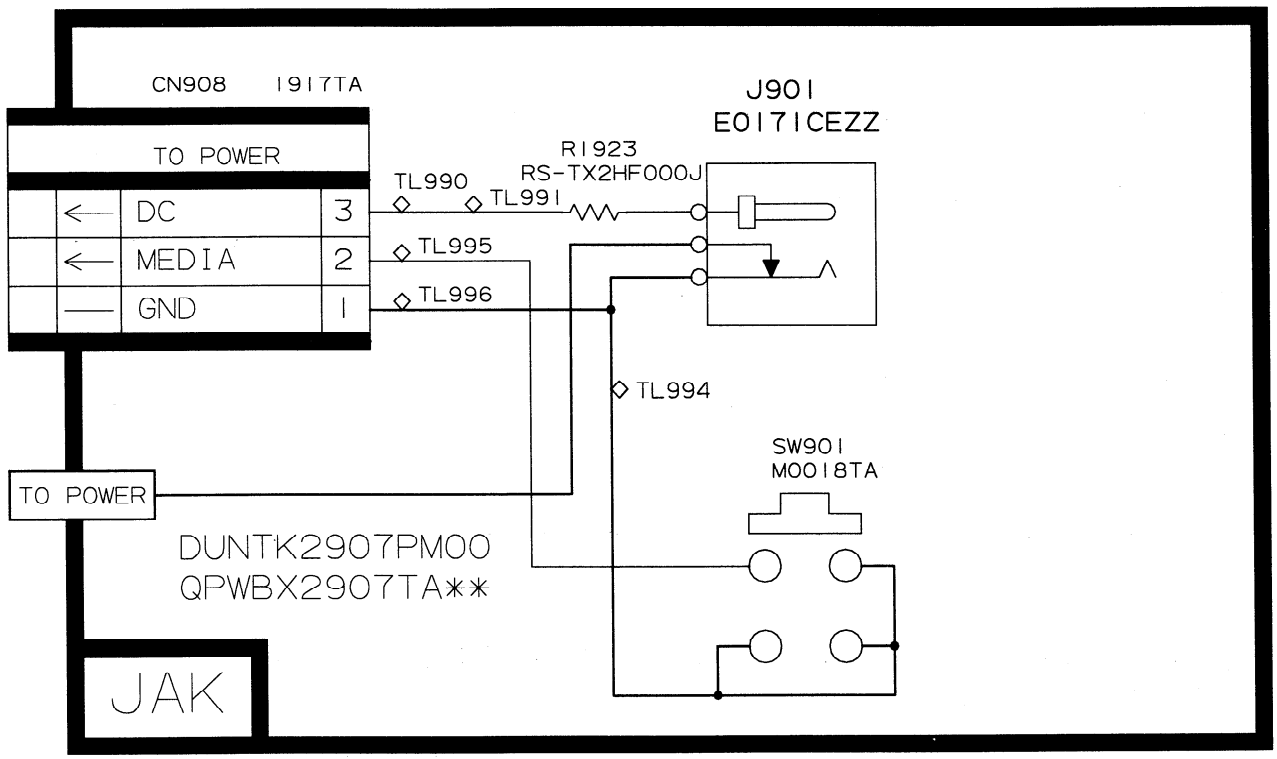
13-5. CCD CIRCUIT SCHEMATIC DIAGRAM



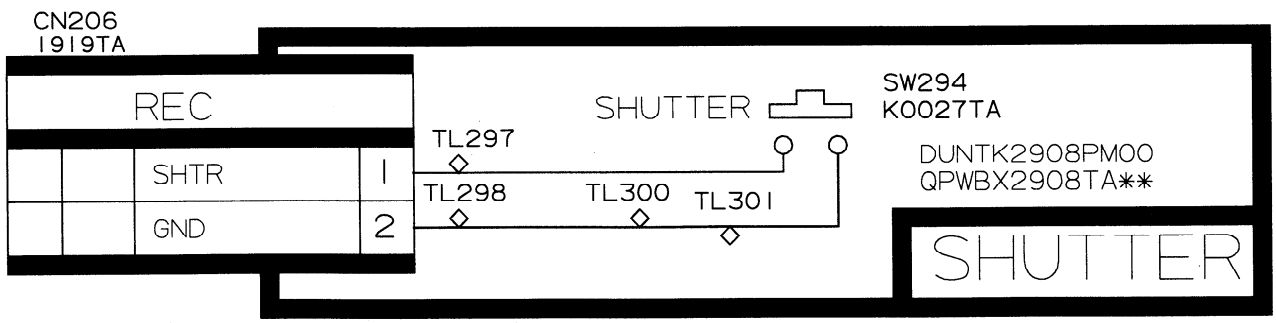
13-6. TILT CIRCUIT SCHEMATIC DIAGRAM



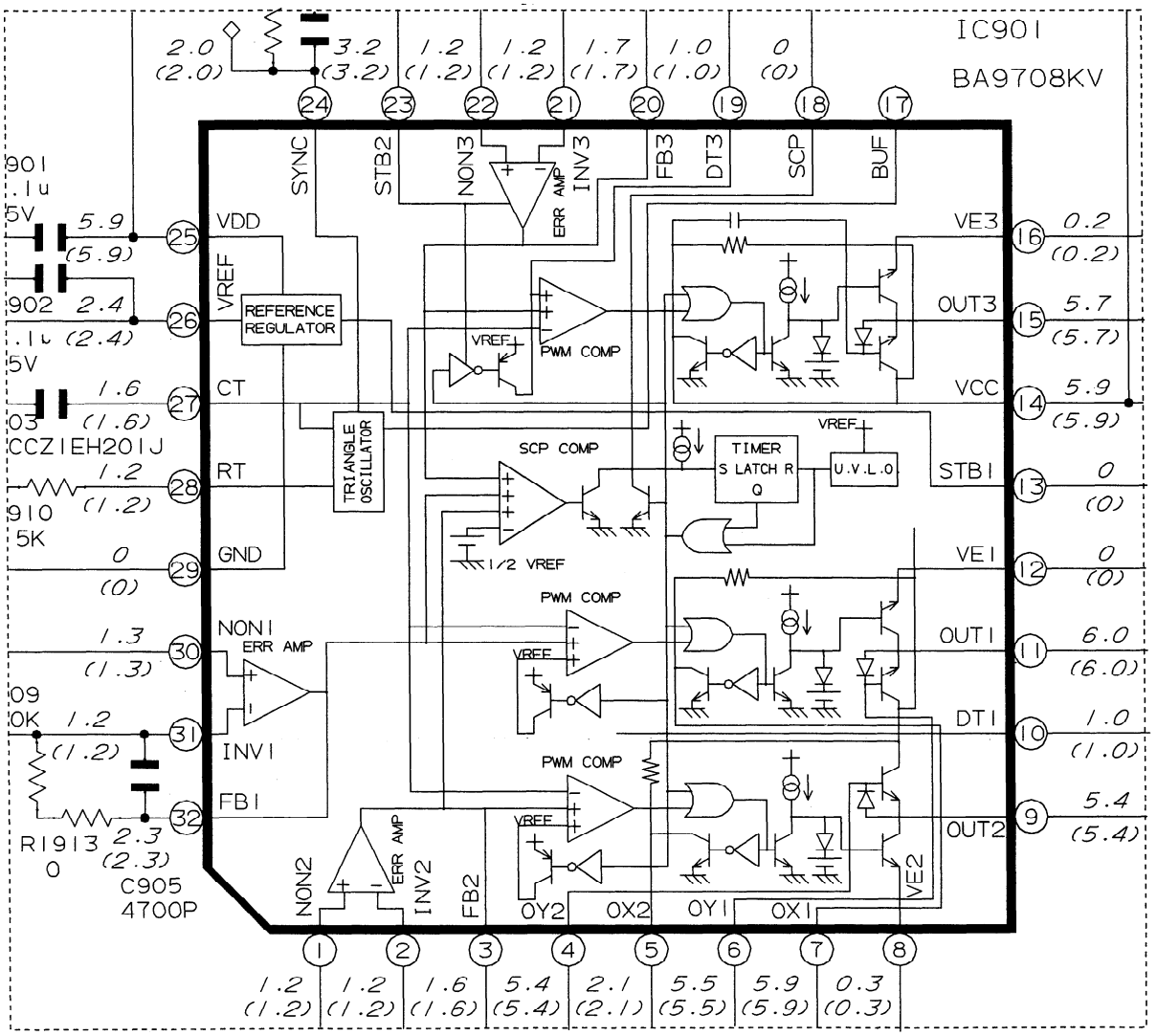
13-7. JACK CIRCUIT SCHEMATIC DIAGRAM



13-8. SHUTTER CIRCUIT SCHEMATIC DIAGRAM

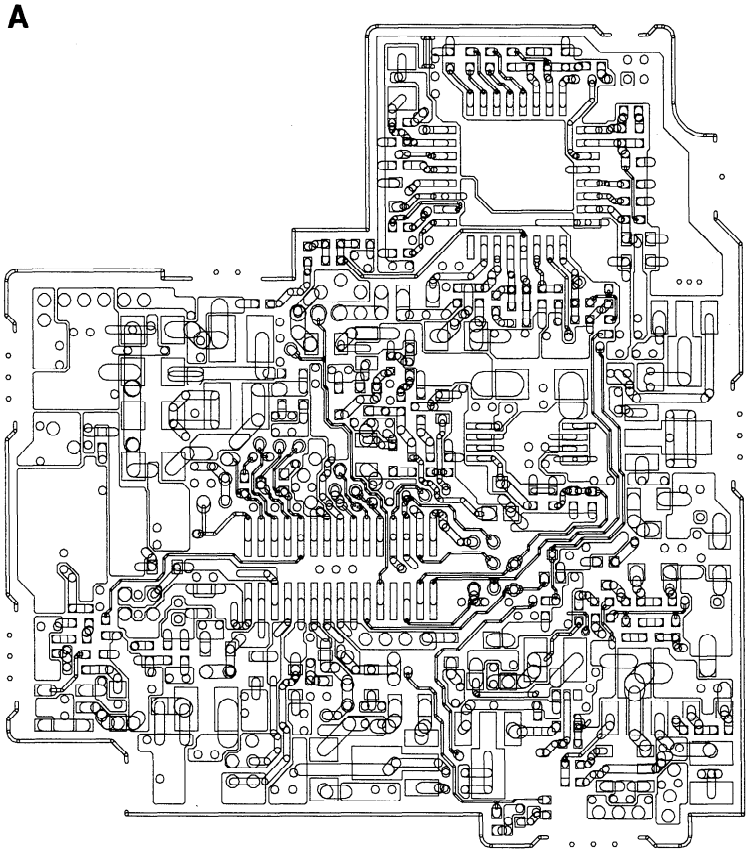


See Page P13-1 Expansion fig of IC901

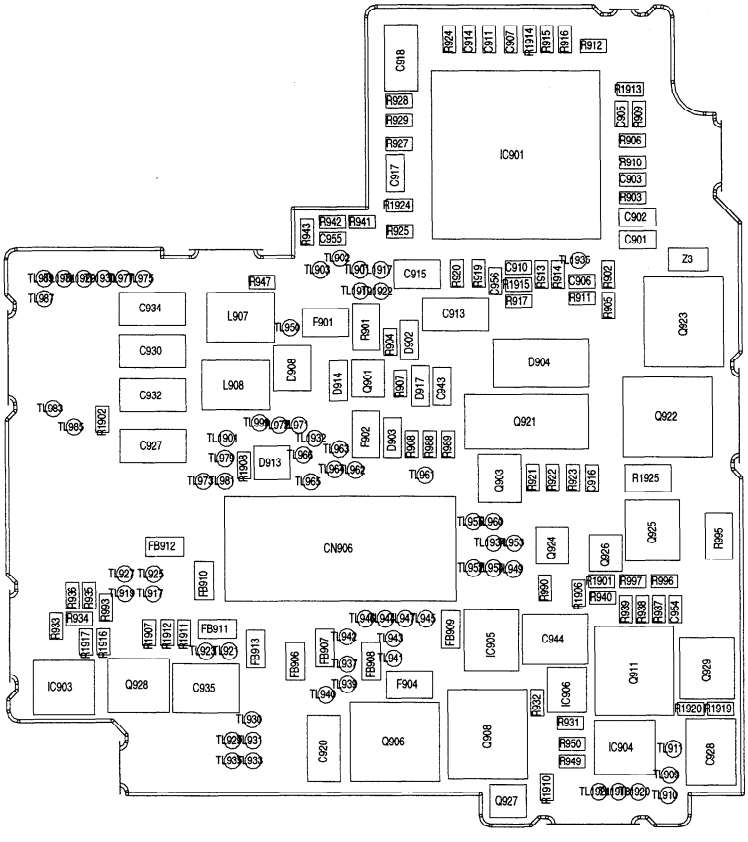


14. PRINTED WIRING BOARD ASSEMBLIES 14-1. POWER PWB

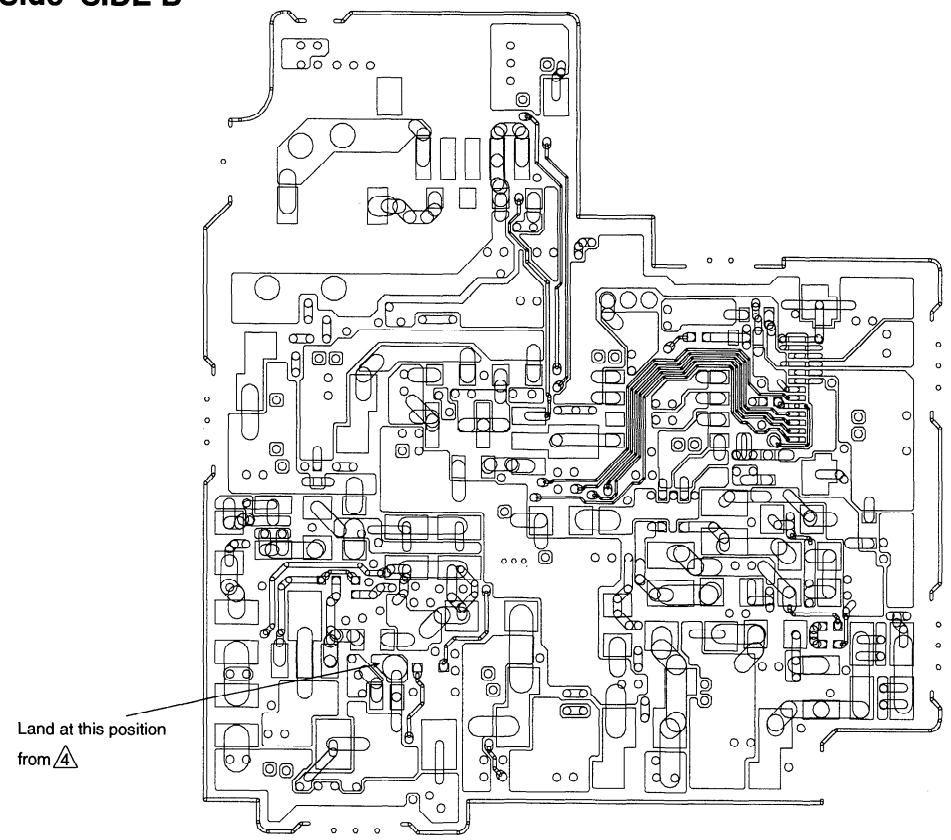
Wiring Side SIDE A



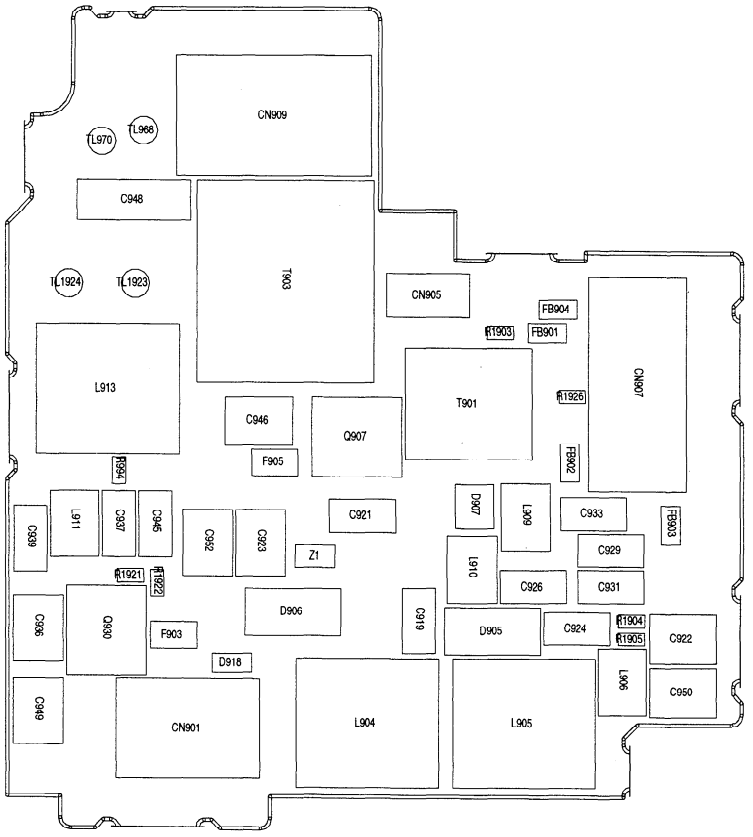
Component Side SIDE A



Wiring Side SIDE B



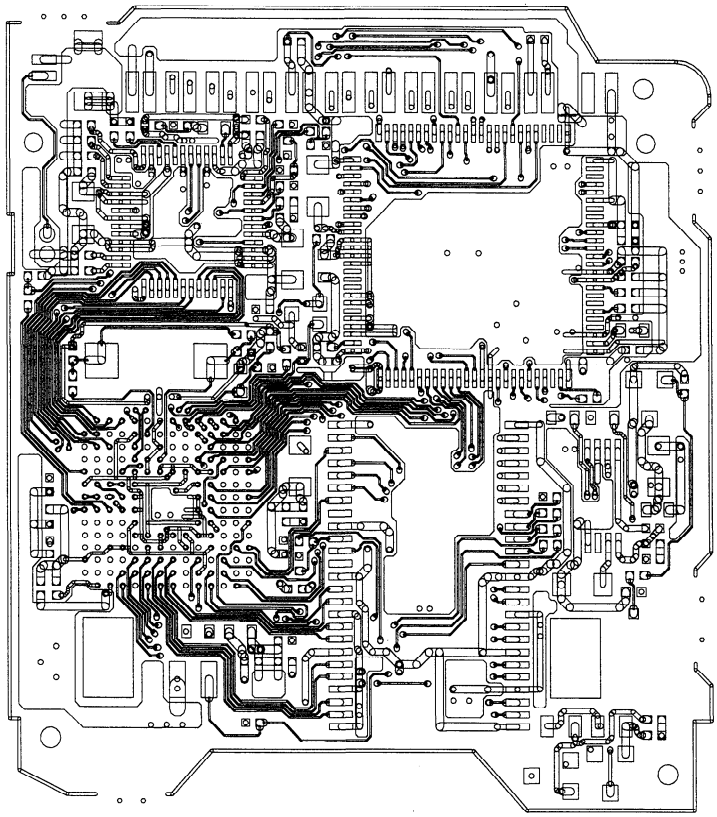
Component Side SIDE B



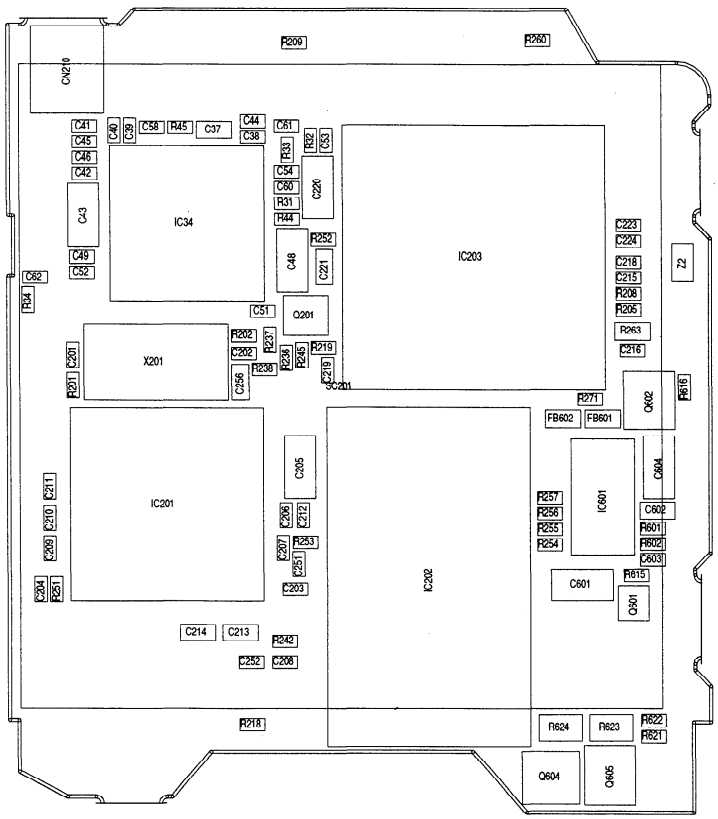
10	11	12	13	14	15	16	17	18	19

14-2. MAIN PWB

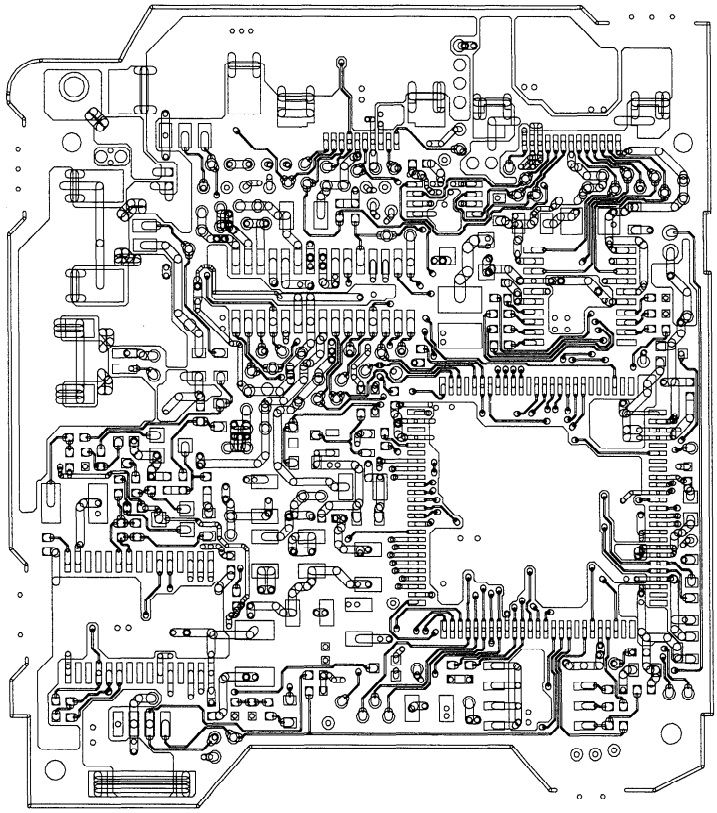
Wiring Side SIDE A



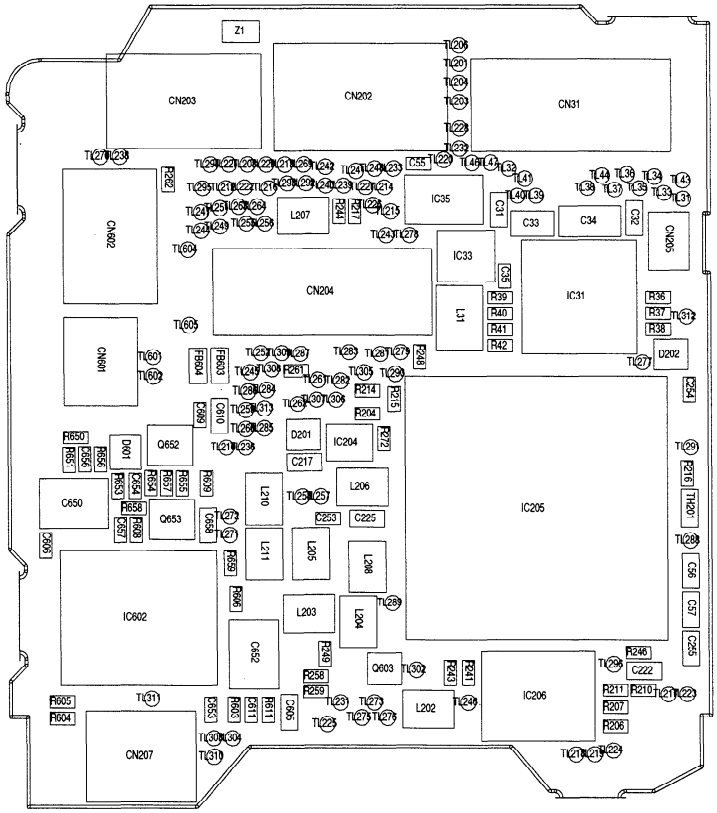
Component Side SIDE A



Wiring Side SIDE B



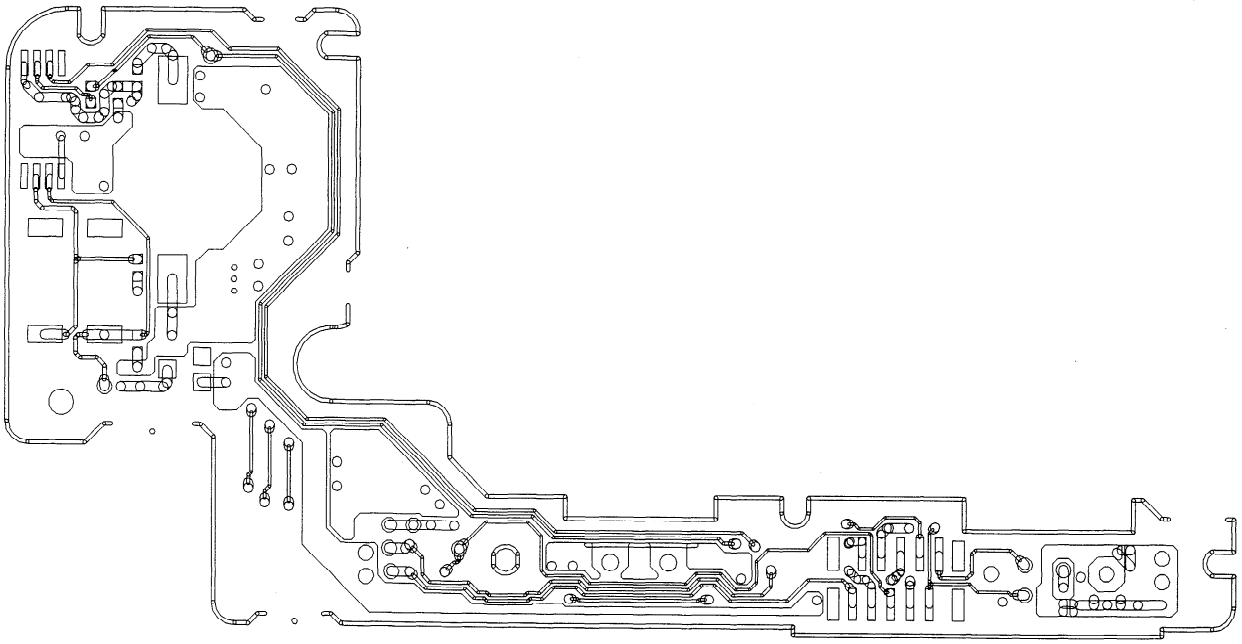
Component Side SIDE B



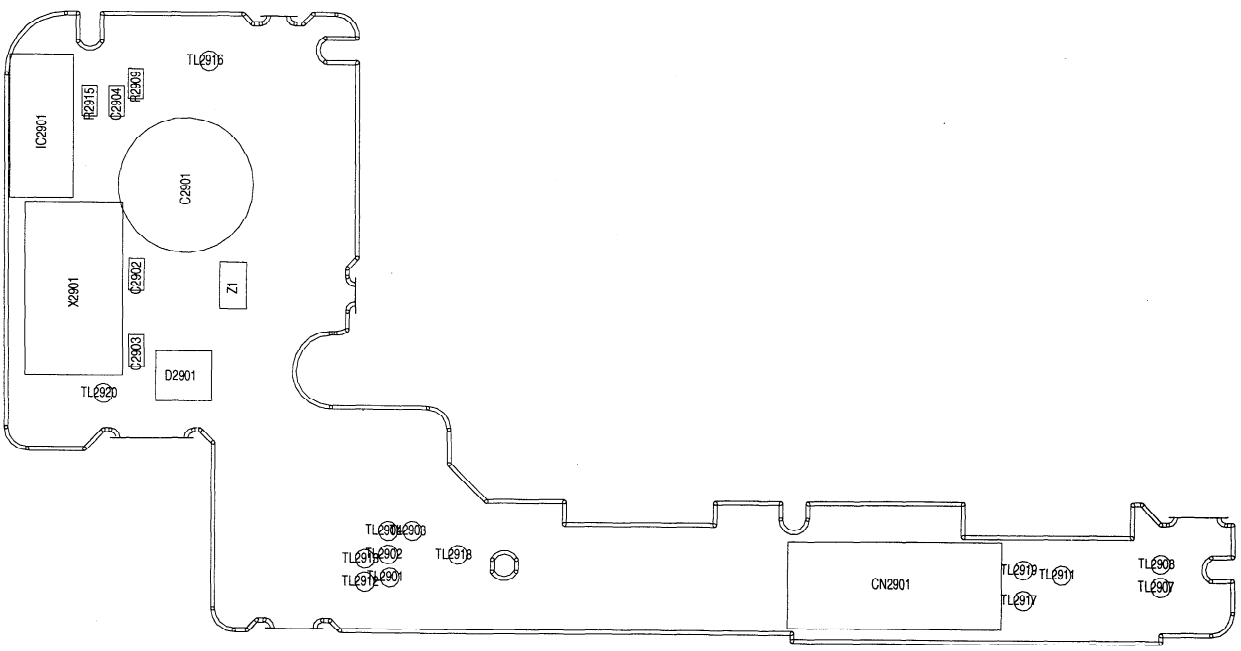
10	11	12	13	14	15	16	17	18	19

14-3. CONTROL PWB

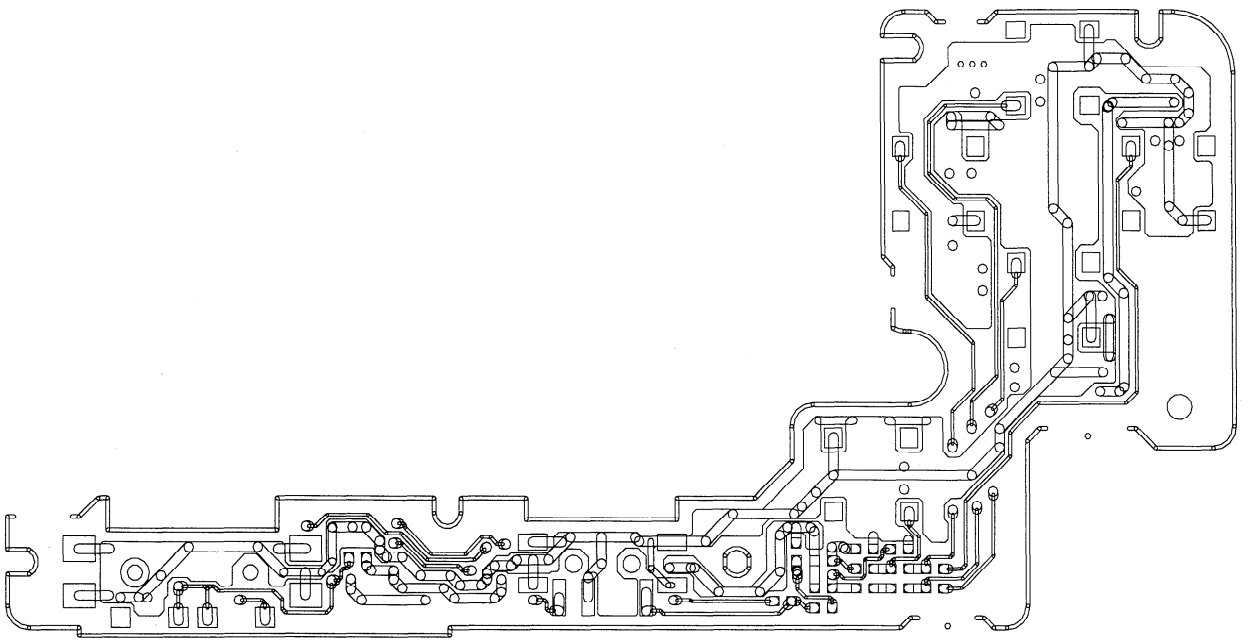
Wiring Side SIDE A



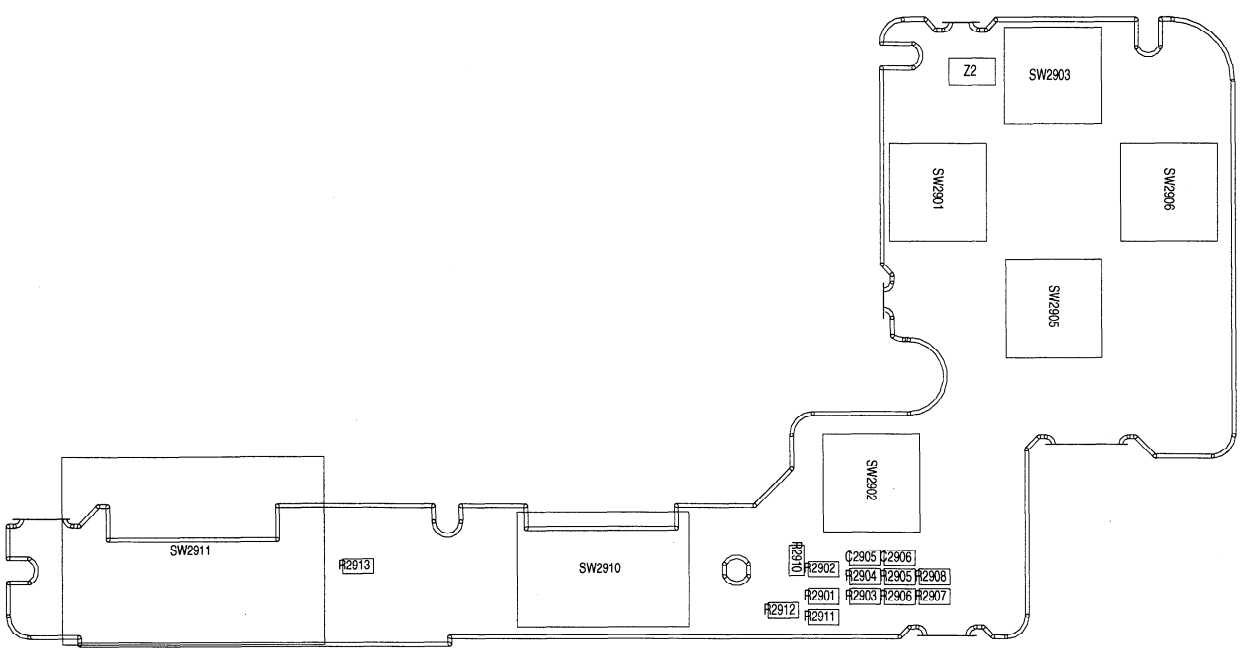
Component Side SIDE A



Wiring Side SIDE B



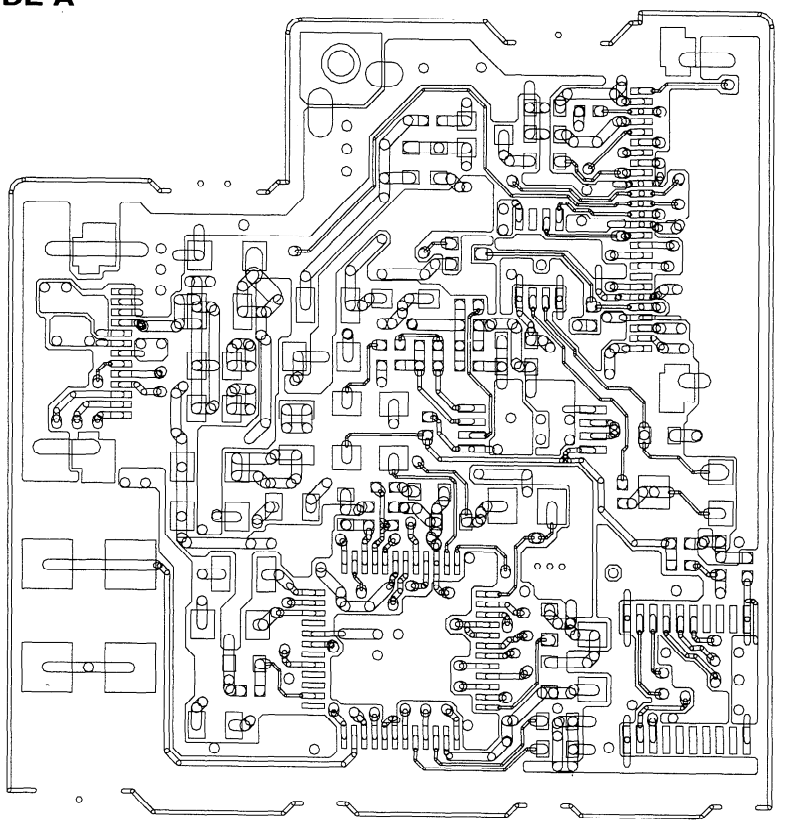
Component Side SIDE B



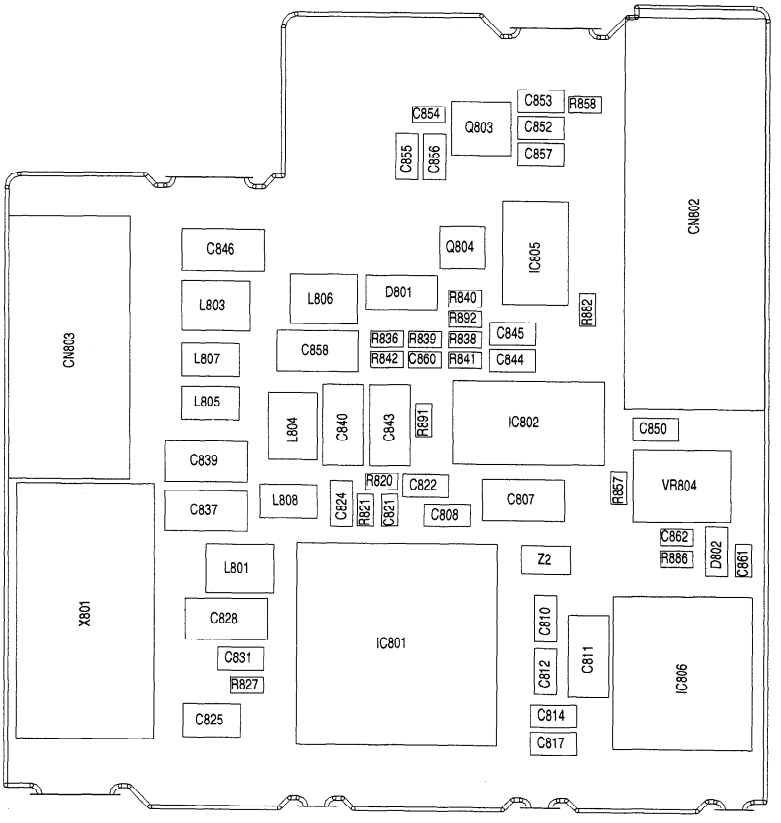
10	11	12	13	14	15	16	17	18	19

14-4. TFT PWB

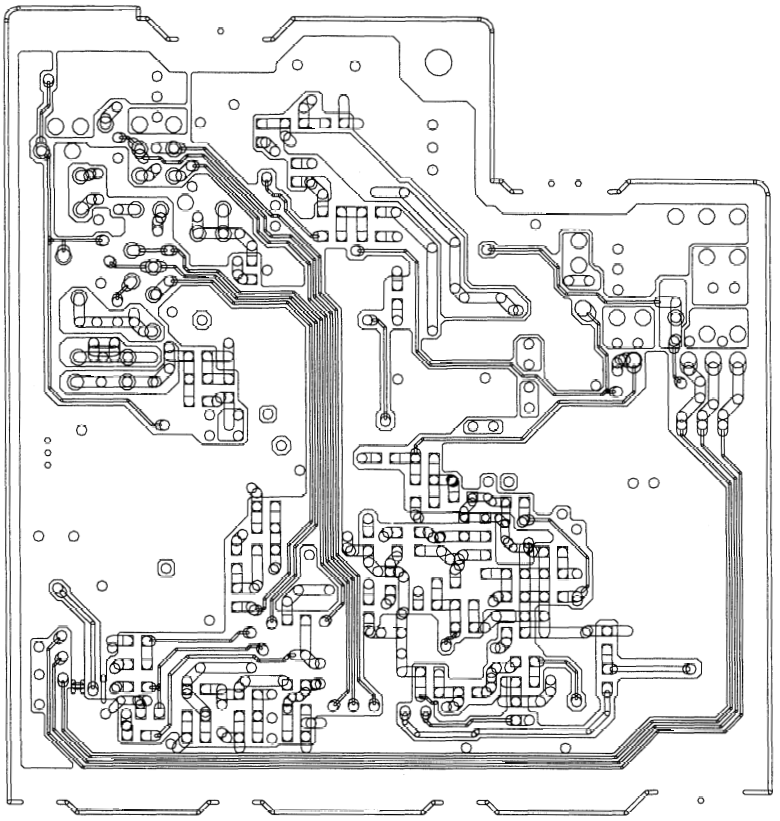
Wiring Side SIDE A



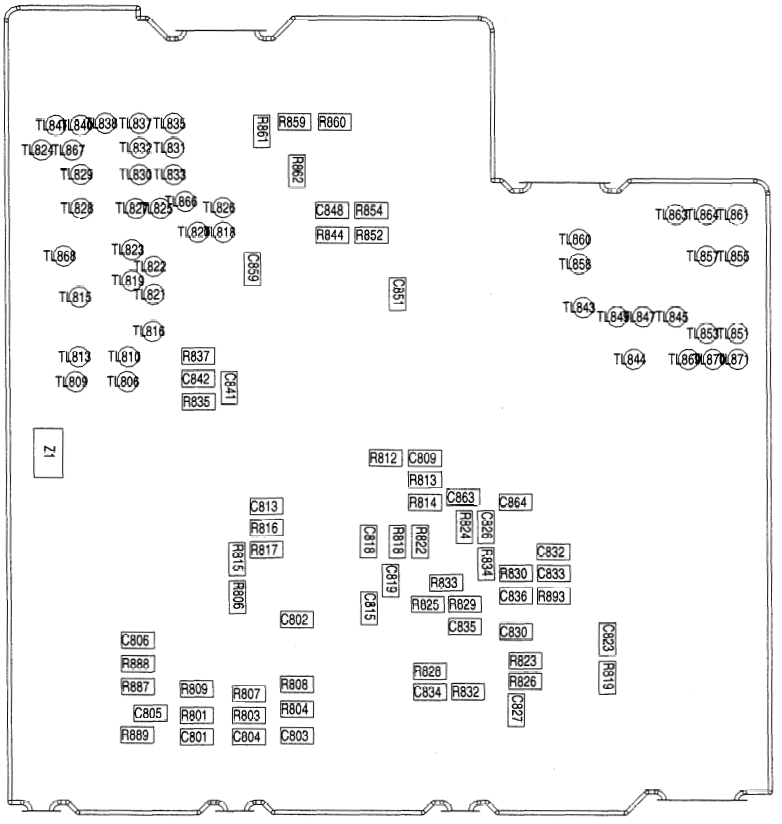
Component Side SIDE A



Wiring Side SIDE B



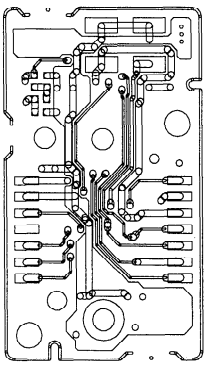
Component Side SIDE B



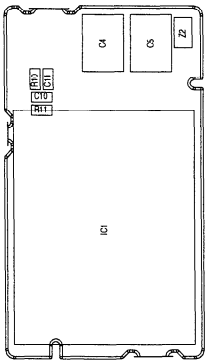
10	11	12	13	14	15	16	17	18	19

14-5. CCD PWB

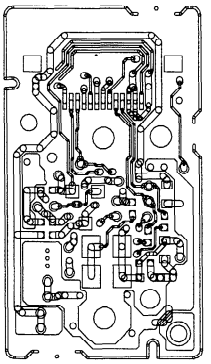
Wiring Side SIDE A



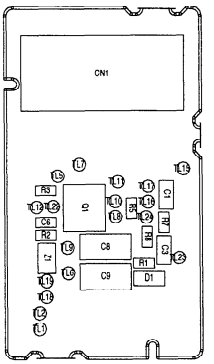
Component Side SIDE A



Wiring Side SIDE B

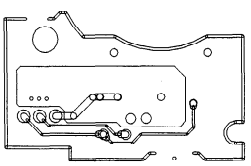


Component Side SIDE B

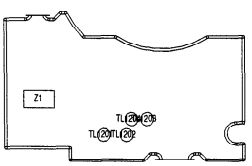


14-6. TILT PWB

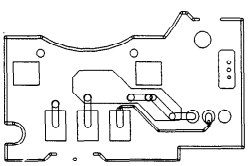
Wiring Side SIDE A



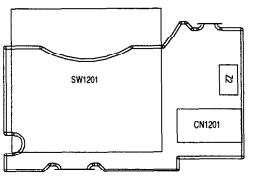
Component Side SIDE A



Wiring Side SIDE B

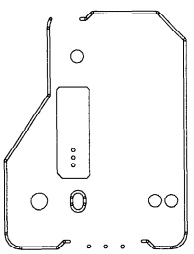


Component Side SIDE B

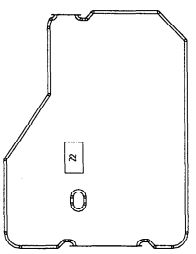


14-7. SHUTTER PWB

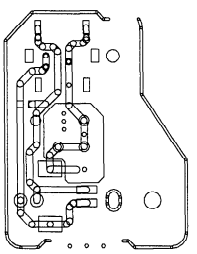
Wiring Side SIDE A



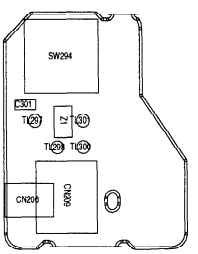
Component Side SIDE A



Wiring Side SIDE B

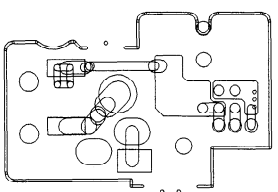


Component Side SIDE B

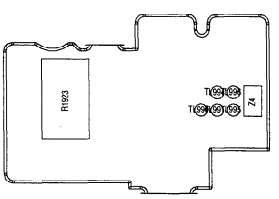


14-8. JACK PWB

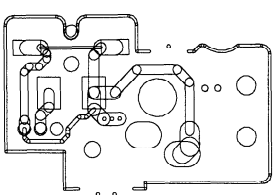
Wiring Side SIDE A



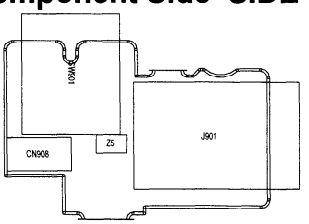
Component Side SIDE A



Wiring Side SIDE B



Component Side SIDE B



15. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

Les pièces marquéss "⚠" sont importantes pour maintenir la sècurité de l'appareil. Ne remplacer ces pieces que par des pièces dont le numéro est spécifié pour maintenir la sécurité et protéger le bon fonctinnement de l'appareil.

" HOW TO ORDER REPLACEMENT PARTS"

in USA: Contact your nearest SHARP Parts Distributor. For location of SHARP Parts Distributor, Call Toll-free 1-IBE800-SHARP

in CANADA: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100.

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION
5. PRICE CODE

⚠ MARK: SAFETY RELATED PARTS
⚠ PIECES: RELATIVES A LA SECURITE

PWB ASSEMBLY IS NOT REPLACEMENT ITEM
L'ASSEMBLANGE P.C.I. EST UN ARTICLE NON REMPLACABLE

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES *(NOT REPLACEMENT ITEM)*

	DUNTK2900QA01	Power PWB Unit	—
	DUNTK2901QA01	Main PWB Unit	—
	DUNTK2902PM00	Control PWB Unit	—
	DUNTK2904QA00	TFT PWB Unit	—
	DUNTK2905PM00	CCD PWB Unit	—
	DUNTK2906PM00	Tilt PWB Unit	—
	DUNTK2907PM00	Jack PWB Unit	—
	DUNTK2908PM00	Shutter PWB Unit	—

DUNTK2900QA01 POWER PWB UNIT

INTEGRATED CIRCUITS

IC901	VHiBA9708KV-1	BA9708KV	AM
IC903	VHiXC62EP25-1	XC62EP25	AE
IC904	VHiXC62EP50-1	XC62EP50	AE
IC905	VHiXC62FP33-1	XC62FP33	AE
IC906	VHiTC7SH04U-1	TC7SH04U	AE

TRANSISTORS

Q901	VSDTC114YE/-1	DTC114YE	AB
Q903	VSDTC115EUA-1	DTC115EUA	AB
Q906	VS2SB1121T/-1	2SB1121T	AC
Q907	VS2SB1121T/-1	2SB1121T	AC
Q908	VS2SK2316//-1	2SK2316	AE
Q911	VS2SA1314C/-1	2SA1314C	AD
Q921	VSSi6463DQ/-1	Si6463DQ	AL
Q922	VS2SD874A-R1E	2SD874A	AD
Q923	VS2SD874A-R1E	2SD874A	AD
Q924	VSDTC114YE/-1	DTC114YE	AB
Q925	VS2SA1362GR-1	2SA1362GR	AC
Q926	VSDTC114YE/-1	DTC114YE	AB
Q927	VSDTC114YE/-1	DTC114YE	AB
Q928	VS2SA1362GR-1	2SA1362GR	AC
Q929	VS2SA1362GR-1	2SA1362GR	AC
Q930	VS2SA1314C/-1	2SA1314C	

DIODES

D902	VHD1SS368//-1	1SS368	AC
D903	VHD1SS368//-1	1SS368	AC
D904	VHDF1AJ3///-1	F1AJ3	AE
D905	VHDF1J2F///-1	F1J2F	AE
D906	VHDF1J2F///-1	F1J2F	AE
D907	VHDDA227///-1	DA227	AB
D908	VHDDA227///-1	DA227	AB
D913	VHDDAN222//-1	DAN222	AA
D914	VHD1SS368//-1	1SS368	AC
D917	VHD1SS368//-1	1SS368	AC
D918	VHD1SS368//-1	1SS368	AC

COILS AND TRANSFORMERS

L904	RCiLP0158TAZZ	Coil, CiLP0158TA	AE
L905	RCiLP0158TAZZ	Coil, CiLP0158TA	AE
L906	VPAXM2R2MR16N	Peaking, 2.2µH	AC
L907	VP-WM220KR71N	Peaking, 22µH	AB
L908	VP-WM220KR71N	Peaking, 22µH	AB
L909	VP-WM220KR71N	Peaking, 22µH	AB
L910	VP-WM220KR71N	Peaking, 22µH	AB
L911	VPAXM100KR42N	Peaking, 10µH	AC
L913	RCiLP0241TAZZ	Coil, CiLP0241TA	AF
⚠ T901	RTRNZ0143TAZZ	Transformer	AF
⚠ T903	RTRNZ0145TAZZ	Transformer	AM

CAPACITORS

C901	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C902	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C903	VCCCCZ1EH201J	200p	25V	Ceramic	AA
C905	VCKYCZ1EB472K	4700p	25V	Ceramic	AB
C906	VCCCCZ1HH101J	100p	50V	Ceramic	AB
C907	VCKYCZ1HF103Z	0.01	50V	Ceramic	AB
C910	VCKYCZ1HB152K	1500p	50V	Ceramic	AB
C911	VCKYCZ1HB102K	1000p	50V	Ceramic	AB
C913	VCKYTQ1CB105K	1	16V	Ceramic	AC
C914	VCKYCZ1HB102K	1000p	50V	Ceramic	AB
C915	VCKYTV1HF223Z	0.022	50V	Ceramic	AA
C916	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C917	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C918	VCKYTQ1CB105K	1	16V	Ceramic	AC
C921	RC-KZ0054TAZZ	2.2	16V	Ceramic	AD
C922	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C923	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C924	RC-KZ0055TAZZ	3.3	16V	Ceramic	AD
C926	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C927	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C928	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C929	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C930	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C931	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C932	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C933	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C934	RC-KZ0072TAZZ	1	25V	Ceramic	AC
C935	RC-KZ0027TAZZ	10	16V	Ceramic	AF
C936	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C937	RC-KZ0055TAZZ	3.3	16V	Ceramic	AD
C939	RC-KZ0055TAZZ	3.3	16V	Ceramic	AD
C943	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C944	RC-KZ0027TAZZ	10	16V	Ceramic	AF
C946	VCFRED1HM273J	0.027	50V		AD
C948	RC-KZ0389CEZZ	10	4kV	Ceramic	AF
C949	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C950	RC-KZ0069TAZZ	10	16V	Ceramic	AE
C952	RC-KZ0069TAZZ	10	16V	Ceramic	AE

Ref. No.	Part No.	★	Description	Code
C954	VCKYCZ1HB221K		220p 50V Ceramic	AA
C955	VCKYCZ1HB561K		560p 50V Ceramic	AC
C956	VCKYCZ1AB104K		0.1 10V Ceramic	AB
	RESISTORS			
R901	VRS-TV1JD332J		3.3k 1/16W Metal Oxide	AA
R902	VRS-CZ1JF331J		330 1/16W Metal Oxide	AA
R903	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R904	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R905	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R906	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R908	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R909	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R910	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R912	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R913	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R914	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R915	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R916	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R917	VRS-CZ1JF124J		120k 1/16W Metal Oxide	AA
R919	VRS-CZ1JF433J		43k 1/16W Metal Oxide	AA
R920	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R921	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R922	VRS-CZ1JF684D		680k 1/16W Metal Oxide	AA
R923	VRS-CZ1JF334D		330k 1/16W Metal Oxide	AA
R924	VRS-CZ1JF390J		39 1/16W Metal Oxide	AA
R925	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R927	VRS-CZ1JF390J		39 1/16W Metal Oxide	AA
R928	VRS-CZ1JF433J		43k 1/16W Metal Oxide	AA
R929	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R931	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R932	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R933	VRS-CZ1JF101D		100 1/16W Metal Oxide	AA
R934	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R935	VRS-CZ1JF432D		4.3k 1/16W Metal Oxide	AA
R936	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R937	VRS-CZ1JF101D		100 1/16W Metal Oxide	AA
R938	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R939	VRS-CZ1JF563D		56k 1/16W Metal Oxide	AA
R940	VRS-CZ1JF473D		47k 1/16W Metal Oxide	AB
R941	VRS-CZ1JF472D		4.7k 1/16W Metal Oxide	AB
R942	VRS-CZ1JF623D		62k 1/16W Metal Oxide	AA
R943	VRS-CZ1JF122D		1.2k 1/16W Metal Oxide	AB
R947	VRS-CZ1JF101D		100 1/16W Metal Oxide	AA
R949	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R950	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R988	VRS-CZ1JF684J		680k 1/16W Metal Oxide	AA
R989	VRS-CZ1JF334J		330k 1/16W Metal Oxide	AA
R990	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R993	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R994	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R995	VRS-TV1JD180J		18 1/16W Metal Oxide	AA
R996	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R997	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1901	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1902	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R1903	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1904	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1905	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R1906	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1907	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1908	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R1911	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1913	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1914	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1916	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R1917	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R1919	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R1920	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1921	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R1922	VRS-CZ1JF471J		470 1/16W Metal Oxide	AA
R1924	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1925	VRS-TV1JD3R9J		3.9 1/16W Metal Oxide	AA
R1926	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
	MISCELLANEOUS PARTS			
CN901	QPLGN0263TAZZ		Plug, 2Pin	AB
CN905	QCNW-1917TAZZ		Connecting Cord, 3Pin	AE
CN906	QSOCZ3043CEZZ		Socket, 30Pin	AG
CN907	QSOCN1393TAZZ		Socket, 13Pin	AD
CN909	QPLGN0564TAZZ		Plug, 5Pin	AC
FB901	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB902	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB903	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB904	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB906	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB907	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB908	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB909	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB910	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB911	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB912	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
FB913	RBLN-0049TAZZ		Balun, BLN-0049TA	AD
⚠ F901	QFS-L1721TAZZ		Fuse	AD
⚠ F902	QFS-L1721TAZZ		Fuse	AD
⚠ F903	QFS-L1022TAZZ		Fuse	AD
⚠ F904	QFS-L1022TAZZ		Fuse	AD
⚠ F905	QFS-L1022TAZZ		Fuse	AD

DUNTK2901QA01
MAIN PWB UNIT

	INTEGRATED CIRCUITS		
IC31	VHiUPD16510-1	UPD16510	AR
IC33	VHiXC62FP33-1	XC62FP33	AE
IC34	VHiVSP2000/-1	VSP2000	AT
IC35	VHiTC7WH04U-1	TC7WH04U	AE
IC201	RH-iX0700TAZZ	IX0700TA	BA
IC202	RH-iX0750TAZZ	IX0700TA	AV
IC203	RH-iX0701TAZZ	IX0701TA	BD
IC204	VHiS80827LN-1	S80827LN	AE
IC205	RH-iX0698TAZZ	IX0698TA	AX
IC206	VHiS24C04A/-1	S24C04A	AL
IC601	VHiNJM2113V-1	NJM2113V	AF
IC602	VHiMSM7716/-1	MSM7716	AT
	TRANSISTORS		
Q201	VS2SC4081R/-1	2SC4081R	AA
Q601	VSDTC114YE/-1	DTC114YE	AB
Q602	VS2SA1362GR-1	2SA1362GR	AC
Q603	VSDTC114YE/-1	DTC114YE	AB
Q604	VS2SA1362GR-1	2SA1362GR	AC
Q605	VS2SA1362GR-1	2SA1362GR	AC
Q652	VS2SC4213B/-1	2SC4213B	AC
Q653	VS2SC4081R/-1	2SC4081R	AA
	DIODES		
D201	VHDDAN222//-1	DAN222	AA
D202	VHDDA221///-1	DA221	AB
D601	VHDDA221///-1	DA221	AB
	PACKAGED CIRCUITS		
TH201	VHHT1103K44-1	Thermistor	AD
X201	RCRSC0154TAZZ	Crystal, CRSC0154TA	AH
	COILS		
L31	VP-WM2R2MR13N	Peaking, 2.2µH	AB
L202	VPAWMR47KR30N	Peaking, 0.47µH	AC
L203	VPAWMR47KR30N	Peaking, 0.47µH	AC
L204	VPAWMR47KR30N	Peaking, 0.47µH	AC
L205	VPAWMR47KR30N	Peaking, 0.47µH	AC
L206	VPAWMR47KR30N	Peaking, 0.47µH	AC
L207	VPAWMR47KR30N	Peaking, 0.47µH	AC
L208	VPAWMR47KR30N	Peaking, 0.47µH	AC
L210	VPAWMR47KR30N	Peaking, 0.47µH	AC
L211	VPAWMR47KR30N	Peaking, 0.47µH	AC

Ref. No.	Part No.	★	Description		Code
	CAPACITORS				
C31	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C32	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C33	VCKYTV1CF225Z	2.2	16V	Ceramic	AC
C34	RC-KZ0084TAZZ	1	25V	Ceramic	AC
C35	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C37	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C38	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C39	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C40	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C41	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C42	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C43	VCSATA1AJ106M	10	10V	Tantalum	AC
C44	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C45	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C46	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C48	VCSATA1AJ106M	10	10V	Tantalum	AC
C49	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C51	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C52	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C53	VCCCCZ1HH100D	10p	50V	Ceramic	AB
C54	VCCCCZ1HH100D	10p	50V	Ceramic	AB
C55	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C56	VCKYCY1AF105Z	1	10V	Ceramic	AC
C57	VCKYCY1AF105Z	1	10V	Ceramic	AC
C62	VCCCCZ1HH180J	18p	50V	Ceramic	AB
C201	VCCCCZ1HH100D	10p	50V	Ceramic	AB
C202	VCCCCZ1HH330J	33p	50V	Ceramic	AB
C203	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C204	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C205	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C206	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C207	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C208	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C209	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C210	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C211	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C212	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C213	VCKYCY1AF105Z	1	10V	Ceramic	AC
C214	VCKYCY1AF105Z	1	10V	Ceramic	AC
C215	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C216	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C217	VCKYCY1AF105Z	1	10V	Ceramic	AC
C218	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C219	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C220	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C221	VCKYCY1AF105Z	1	10V	Ceramic	AC
C222	VCKYCY1AF105Z	1	10V	Ceramic	AC
C223	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C224	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C225	VCKYCY1AF105Z	1	10V	Ceramic	AC
C252	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C253	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C254	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C255	VCKYCY1AF105Z	1	10V	Ceramic	AC
C256	VCKYCY1AF105Z	1	10V	Ceramic	AC
C601	VCSATA1AJ106M	10	10V	Tantalum	AC
C602	VCKYCY1AF105Z	1	10V	Ceramic	AC
C603	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C604	VCSATA1CJ106M	10	16V	Tantalum	AD
C605	VCKYCY1AF105Z	1	10V	Ceramic	AC
C606	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C610	VCKYCY1CB563K	0.056	16V	Ceramic	AB
C611	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C650	VCSATE1AJ336M	33	10V	Tantalum	AG
C652	VCSATE1AJ336M	33	10V	Tantalum	AG
C653	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C654	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C656	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C657	VCKYCZ1HB271K	270p	50V	Ceramic	AC
C658	VCKYCY1AF105Z	1	10V	Ceramic	AC
	RESISTORS				
R31	VRS-CZ1JF103J	10k	1/16W	Metal Oxide	AA
R36	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description		Code
R37	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R38	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R39	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R40	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R41	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R42	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R44	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R45	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R201	VRS-CZ1JF561J	560	1/16W	Metal Oxide	AA
R202	VRS-CZ1JF105J	1M	1/16W	Metal Oxide	AA
R204	VRS-CZ1JF822J	8.2k	1/16W	Metal Oxide	AA
R205	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R206	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R207	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R208	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R209	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R210	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R211	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R214	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R215	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R216	VRS-CZ1JF822J	8.2k	1/16W	Metal Oxide	AA
R217	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R218	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R219	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R236	VRS-CZ1JF272J	2.7k	1/16W	Metal Oxide	AA
R237	VRS-CZ1JF122J	1.2k	1/16W	Metal Oxide	AA
R238	VRS-CZ1JF152J	1.5k	1/16W	Metal Oxide	AA
R241	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R242	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R243	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R244	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R245	VRS-CZ1JF181J	180	1/16W	Metal Oxide	AA
R246	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R248	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R249	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R251	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R252	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R253	VRS-CZ1JF221J	220	1/16W	Metal Oxide	AA
R254	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R255	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R256	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R257	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R258	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R259	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R260	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R261	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R262	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R263	VRS-CY1JF000J	0	1/16W	Metal Oxide	AA
R271	VRS-CZ1JF561J	560	1/16W	Metal Oxide	AA
R272	VRS-CZ1JF561J	560	1/16W	Metal Oxide	AA
R601	VRS-CZ1JF153J	15k	1/16W	Metal Oxide	AA
R602	VRS-CZ1JF332J	3.3k	1/16W	Metal Oxide	AA
R603	VRS-CZ1JF104J	100k	1/16W	Metal Oxide	AA
R604	VRS-CZ1JF103J	10k	1/16W	Metal Oxide	AA
R605	VRS-CZ1JF153J	15k	1/16W	Metal Oxide	AA
R606	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R608	VRS-CZ1JF564J	560k	1/16W	Metal Oxide	AA
R609	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R611	VRS-CZ1JF473J	47k	1/16W	Metal Oxide	AA
R615	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R616	VRS-CZ1JF273J	27k	1/16W	Metal Oxide	AA
R621	VRS-CZ1JF273J	27k	1/16W	Metal Oxide	AA
R622	VRS-CZ1JF273J	27k	1/16W	Metal Oxide	AA
R623	VRS-TV1JD471J	470	1/16W	Metal Oxide	AA
R624	VRS-TV1JD471J	470	1/16W	Metal Oxide	AA
R650	VRS-CZ1JF682J	6.8k	1/16W	Metal Oxide	AA
R651	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R653	VRS-CZ1JF821J	820	1/16W	Metal Oxide	AA
R654	VRS-CZ1JF153J	15k	1/16W	Metal Oxide	AA
R655	VRS-CZ1JF222J	2.2k	1/16W	Metal Oxide	AA
R656	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R657	VRS-CZ1JF104J	100k	1/16W	Metal Oxide	AA
R658	VRS-CZ1JF153J	15k	1/16W	Metal Oxide	AA
R659	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
			MISCELLANEOUS PARTS	
CN31	QSOCN1393TAZZ		Socket, 13Pin	AD
CN202	QSOCN1086TAZZ		Socket, 10Pin	AC
CN203	QPLGN0363TAZZ		Plug, 3Pin	AC
CN204	QCNCW3082TAZZ		Connector, 30Pin	AF
CN205	QCNW-1919TAZZ		Connecting Cord, 2Pin	AE
CN207	QPLGN0474TAZZ		Plug, 4Pin	AD
CN601	QPLGN0276TAZZ		Plug, 2Pin	AD
CN602	QPLGN0263TAZZ		Plug, 2Pin	AB
FB32	RBLN-0080TAZZ		Balun, BLN-0080TA	AC
FB33	RBLN-0080TAZZ		Balun, BLN-0080TA	AC
FB34	RBLN-0080TAZZ		Balun, BLN-0080TA	AC
FB601	RBLN-0081TAZZ		Balun, BLN-0081TA	AB
FB602	RBLN-0081TAZZ		Balun, BLN-0081TA	AB
FB603	RBLN-0081TAZZ		Balun, BLN-0081TA	AB
FB604	RBLN-0081TAZZ		Balun, BLN-0081TA	AB
SC201	QSOCZ0056TAZZ		Socket, 26Pin	AM

DUNTK2902PM00
CONTROL PWB UNIT

Ref. No.	Part No.	★	Description	Code
			INTEGRATED CIRCUIT	
IC2901	VHiS3530A//-1		S3530A	AH
			DIODE	
D2901	VHDRB451F//-1		RB451F	AC
			PACKAGED CIRCUIT	
X2901	RCRSC0032TAZZ		Crystal, CRSC0032TA	AG
			CAPACITORS	
C2901	RC-DZ0004TAZZ		Capacitor	AK
C2902	VCCCCZ1HH9R0D		9p 50V Ceramic	AA
C2903	VCCCCZ1HH9R0D		9p 50V Ceramic	AA
C2904	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C2905	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C2906	VCKYCZ1HB102K		1000p 50V Ceramic	AB
			RESISTORS	
R2901	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R2902	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R2903	VRS-CZ1JF562D		5.6k 1/16W Metal Oxide	AB
R2904	VRS-CZ1JF562D		5.6k 1/16W Metal Oxide	AB
R2905	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R2906	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R2907	VRS-CZ1JF563D		56k 1/16W Metal Oxide	AA
R2908	VRS-CZ1JF563D		56k 1/16W Metal Oxide	AA
R2909	VRS-CZ1JF470J		47 1/16W Metal Oxide	AA
R2910	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R2911	VRS-CZ1JF562D		5.6k 1/16W Metal Oxide	AB
R2912	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R2915	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
			MISCELLANEOUS PARTS	
CN2901	QSOCN1078TAZZ		Socket, 10Pin	AD
SW2901	QSW-K0026TAZZ		Switch, Left	AC
SW2902	QSW-K0026TAZZ		Switch, Menu	AC
SW2903	QSW-K0026TAZZ		Switch, Up	AC
SW2905	QSW-K0026TAZZ		Switch, Down	AC
SW2906	QSW-K0026TAZZ		Switch, Right	AC
SW2910	QSW-S0203TAZZ		Switch	AD
SW2911	QSW-S0204TAZZ		Switch	AF

DUNTK2904QA00
TFT PWB UNIT

Ref. No.	Part No.	★	Description	Code
			INTEGRATED CIRCUITS	
IC801	VHiiR3Y29AM-1		IR3Y29AM	AV
IC802	VHiNJM4565V-1		NJM4565V	AF
IC805	VHiTC7W14U/-1		TC7W14U	AG
IC806	VHiMB8346BV-1		MB8346BV	AN
			TRANSISTORS	
Q803	VS2SC4081R/-1		2SC4081R	AA
Q804	VSDTC114EE/-1		DTC114EE	AB
			DIODES	
D801	VHDHVU359TR-1		HVU359TR	AE
D802	VHD1SS368//-1		1SS368	AC
			PACKAGED CIRCUIT	
X801	RCRSC0087TAZZ		Crystal, CRSC0087TA	AK
			COILS	
L801	VPAWM470J6R4N		Peaking, 47µH	AC
L803	VPAWM470J6R4N		Peaking, 47µH	AC
L804	VPAWM470J6R4N		Peaking, 47µH	AC
L806	VPAWM470J6R4N		Peaking, 47µH	AC
L805	VPM6N100MR75N		Peaking, 10µH	AC
L807	VPM6N100MR75N		Peaking, 10µH	AC
L808	VP-9N330KR71N		Peaking, 33µH	AD
			CONTROL	
VR804	RVR-M4553CEZZ		Variable Resistor	AC
			CAPACITORS	
C801	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C802	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C803	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C804	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C805	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C806	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C807	VCKYTQ1CB105K		1 16V Ceramic	AC
C808	VCCCCY1HH471J		470p 50V Ceramic	AA
C810	VCKYCY1AF105Z		1 10V Ceramic	AC
C811	VCSATA1CJ106M		10 16V Tantalum	AD
C812	VCKYCY1AF105Z		1 10V Ceramic	AC
C813	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C814	VCKYCY1AF105Z		1 10V Ceramic	AC
C815	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C817	VCKYCY1AF105Z		1 10V Ceramic	AC
C818	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C819	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C821	VCCCCZ1HH560J		56p 50V Ceramic	AB
C822	VCKYCY1AF105Z		1 10V Ceramic	AC
C823	VCCCCZ1HH6R0D		6p 50V Ceramic	AA
C824	VCKYCY1AF105Z		1 10V Ceramic	AC
C825	VCKYTV1CB474K		0.47 16V Ceramic	AC
C826	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C827	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C828	VCSATA1AJ106M		10 10V Tantalum	AC
C830	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C831	VCKYCY1CF334Z		0.33 16V Ceramic	AA
C832	VCCCCZ1HH270J		27p 50V Ceramic	AB
C833	VCCCCZ1HH150J		15p 50V Ceramic	AB
C834	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C835	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C836	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C837	VCSATA1AJ106M		10 10V Tantalum	AC
C839	VCSATA1CJ106M		10 16V Tantalum	AD
C840	VCSATA1AJ106M		10 10V Tantalum	AC
C841	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C842	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C843	VCSATA1AJ106M		10 10V Tantalum	AC
C844	VCKYCY1EF104Z		0.1 25V Ceramic	AA
C845	VCKYCY1EF104Z		0.1 25V Ceramic	AA
C846	VCSATA1AJ106M		10 10V Tantalum	AC
C848	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C850	VCCCCY1HH561J		560p 50V Ceramic	AB
C851	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C852	VCKYCY1AF105Z		1 10V Ceramic	AC
C853	VCKYCY1AF105Z		1 10V Ceramic	AC
C854	VCKYCZ1HB102K		1000p 50V Ceramic	AB

Ref. No.	Part No.	★	Description			Code
C855	VCCCCY1HH151J		150p	50V	Ceramic	AA
C856	VCCCCY1HH561J		560p	50V	Ceramic	AB
C857	VCCCCY1HH221J		220p	50V	Ceramic	AA
C858	VCSATA1AJ335M		3.3	10V	Tantalum	AC
C859	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C860	VCCCCZ1HH8R0D		8p	50V	Ceramic	AB
C861	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C862	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C863	VCCCCZ1HH560J		56p	50V	Ceramic	AB
C864	VCCCCZ1HH820J		82p	50V	Ceramic	AB
	RESISTORS					
R801	VRS-CZ1JF333D		33k	1/16W	Metal Oxide	AB
R803	VRS-CZ1JF393D		39k	1/16W	Metal Oxide	AB
R804	VRS-CZ1JF203D		20k	1/16W	Metal Oxide	AA
R806	VRS-CZ1JF102J		1k	1/16W	Metal Oxide	AA
R807	VRS-CZ1JF153D		15k	1/16W	Metal Oxide	AB
R808	VRS-CZ1JF103D		10k	1/16W	Metal Oxide	AB
R809	VRS-CZ1JF473D		47k	1/16W	Metal Oxide	AB
R812	VRS-CZ1JF102J		1k	1/16W	Metal Oxide	AA
R813	VRS-CZ1JF102J		1k	1/16W	Metal Oxide	AA
R815	VRS-CZ1JF105J		1M	1/16W	Metal Oxide	AA
R816	VRS-CZ1JF333D		33k	1/16W	Metal Oxide	AB
R817	VRS-CZ1JF433D		43k	1/16W	Metal Oxide	AA
R818	VRS-CZ1JF183D		18k	1/16W	Metal Oxide	AB
R819	VRS-CZ1JF222D		2.2k	1/16W	Metal Oxide	AA
R820	VRS-CZ1JF272D		2.7k	1/16W	Metal Oxide	AB
R821	VRS-CZ1JF334J		330k	1/16W	Metal Oxide	AA
R822	VRS-CZ1JF183D		18k	1/16W	Metal Oxide	AB
R823	VRS-CZ1JF562J		5.6k	1/16W	Metal Oxide	AA
R824	VRS-CZ1JF393D		39k	1/16W	Metal Oxide	AB
R826	VRS-CZ1JF822J		8.2k	1/16W	Metal Oxide	AA
R827	VRS-CZ1JF105J		1M	1/16W	Metal Oxide	AA
R828	VRS-CZ1JF333D		33k	1/16W	Metal Oxide	AB
R829	VRS-CZ1JF393D		39k	1/16W	Metal Oxide	AB
R830	VRS-CZ1JF183D		18k	1/16W	Metal Oxide	AB
R832	VRS-CZ1JF223D		22k	1/16W	Metal Oxide	AB
R833	VRS-CZ1JF153D		15k	1/16W	Metal Oxide	AB
R834	VRS-CZ1JF223D		22k	1/16W	Metal Oxide	AB
R835	VRS-CZ1JF561D		560	1/16W	Metal Oxide	AA
R836	VRS-CZ1JF000J		0	1/16W	Metal Oxide	AA
R837	VRS-CZ1JF472D		4.7k	1/16W	Metal Oxide	AB
R838	VRS-CZ1JF154D		150k	1/16W	Metal Oxide	AB
R839	VRS-CZ1JF104J		100k	1/16W	Metal Oxide	AA
R840	VRS-CZ1JF000J		0	1/16W	Metal Oxide	AA
R841	VRS-CZ1JF154D		150k	1/16W	Metal Oxide	AB
R842	VRS-CZ1JF473J		47k	1/16W	Metal Oxide	AA
R844	VRS-CZ1JF181J		180	1/16W	Metal Oxide	AA
R852	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
R854	VRS-CZ1JF181J		180	1/16W	Metal Oxide	AA
R857	VRS-CZ1JF202J		2k	1/16W	Metal Oxide	AA
R858	VRS-CZ1JF104J		100k	1/16W	Metal Oxide	AA
R859	VRS-CZ1JF332J		3.3k	1/16W	Metal Oxide	AA
R860	VRS-CZ1JF472J		4.7k	1/16W	Metal Oxide	AA
R861	VRS-CZ1JF181J		180	1/16W	Metal Oxide	AA
R862	VRS-CZ1JF391J		390	1/16W	Metal Oxide	AA
R882	VRS-CZ1JF472J		4.7k	1/16W	Metal Oxide	AA
R886	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
R887	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
R888	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
R889	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
R891	VRS-CZ1JF154J		150k	1/16W	Metal Oxide	AA
R892	VRS-CZ1JF154D		150k	1/16W	Metal Oxide	AB
R893	VRS-CZ1JF103J		10k	1/16W	Metal Oxide	AA
	MISCELLANEOUS PARTS					
CN802	QSOCN2687TAZZ		Socket, 26Pin			AE
CN803	QSOCN1393TAZZ		Socket, 13Pin			AD

DUNTK2905PM00
CCD PWB UNIT

Ref. No.	Part No.	★	Description			Code
	INTEGRATED CIRCUIT					
IC1	VHiLZ0P3641-1		LZ0P3641			BH
	TRANSISTOR					
Q1	VS2SC2404-C-1		2SC2404-C			AD
	DIODE					
D1	VHD1SS368//-1		1SS368			AC
	CAPACITORS					
C1	VCKYCY1EF104Z		0.1	25V	Ceramic	AA
C3	VCCCCY1HH271J		270p	50V	Ceramic	AA
C4	VCSATE1VJ225M		2.2	35V	Tantalum	AD
C5	VCSATE1VJ225M		2.2	35V	Tantalum	AD
C6	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C8	VCKYTQ1HB224K		0.22	50V	Ceramic	AC
C9	VCKYTQ1HB224K		0.22	50V	Ceramic	AC
C10	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C11	VCCCCZ1HH180J		18p	50V	Ceramic	AB
	RESISTORS					
R1	VRS-CZ1JF105J		1M	1/16W	Metal Oxide	AA
R2	VRS-CZ1JF101J		100	1/16W	Metal Oxide	AA
R3	VRS-CZ1JF392J		3.9k	1/16W	Metal Oxide	AA
R5	VRS-CZ1JF101J		100	1/16W	Metal Oxide	AA
R7	VRS-CZ1JF101J		100	1/16W	Metal Oxide	AA
R8	VRS-CZ1JF101J		100	1/16W	Metal Oxide	AA
R10	VRS-CZ1JF101J		100	1/16W	Metal Oxide	AA
R11	VRS-CZ1JF105J		1M	1/16W	Metal Oxide	AA
	MISCELLANEOUS PART					
CN1	QSOCN1305TAN1		Socket, 13Pin			AF

DUNTK2906PM00
TILT PWB UNIT

Ref. No.	Part No.	★	Description	Code
	MISCELLANEOUS PARTS			
CN1201	QCNW-1922TAZZ		Connecting Cord, 3Pin	AE
SW1201	QSW-M0032TAZZ		Switch	AE

DUNTK2907PM00
JACK PWB UNIT

Ref. No.	Part No.	★	Description			Code
	RESISTOR					
R1923	VRS-TX2HF000J		0	1/2W	Metal Oxide	AA
	MISCELLANEOUS PARTS					
CN908	QCNW-1917TAZZ		Connecting Cord, 3Pin			AE
J901	QJAKE0171CEZZ		Jack			AD
SW901	QSW-M0018TAZZ		Switch			AC

DUNTK2908PM00
SHUTTER PWB UNIT

Ref. No.	Part No.	★	Description	Code
	MISCELLANEOUS PARTS			
CN206	QCNW-1919TAZZ		Connecting Cord, 2Pin	AE
SW294	QSW-K0027TAZZ		Switch, Shutter	AD

SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
	CDSKA0032TA01		SmartMedia	BF
	CDSKA0039TA01		CD ROM	AM
	GCASN0022TAZZ		Soft Case	AU
	RUNTK0350TAZZ		Floppy Disk Adapter	BV
	TiNSE0345TAZZ		Operation Manual (For Main Unit)	AG
	TiNSE0346TAZZ		Operation Manual (For ROM)	AD
	TiNSE0352TAZZ		Operation Manual (For Flash Calipers)	AE
	UADP-0243TAZZ		AC Adapter	BB
	UBNDT0101TAZZ		Hand Strap	AG

PACKING PARTS (NOT REPLACEMENT ITEM)

Ref. No.	Part No.	★	Description	Code
	SPAKA6316TAZZ		Packing Add.(Top)	—
	SPAKA6317TAZZ		Packing Add.(Bottom)	—
	SPAKA6333TAZZ		AC Adapter Add.	—
	SPAKC7445TAZZ		Packing Case	—
	SPAKP6122TAZZ		Polystylene Sack	—
	SPAKP6125TAZZ		Pat	—

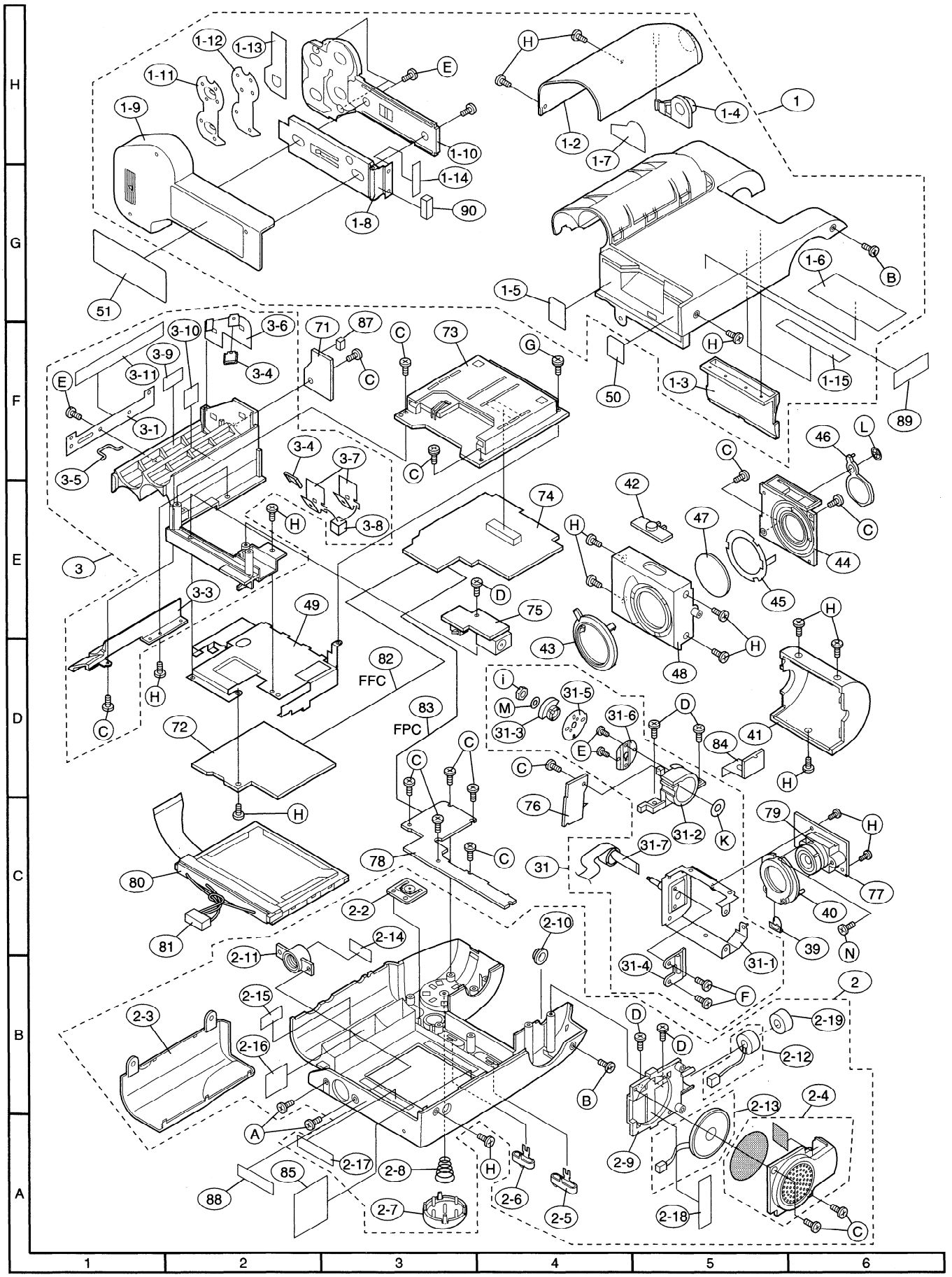
SERVICE JIG

Ref. No.	Part No.	★	Description	Code
	QCNW-1948TAZZ		Main PWB (CN204)- Power PWB (CN906), 30Pin	BS
	QCNW-1949TAZZ		Main PWB (CN202)- Control PWB (CN2901), 10Pin	AP
	QCNW-1950TAZZ		Power PWB (CN907)- TFT PWB (CN803), 13Pin	AP

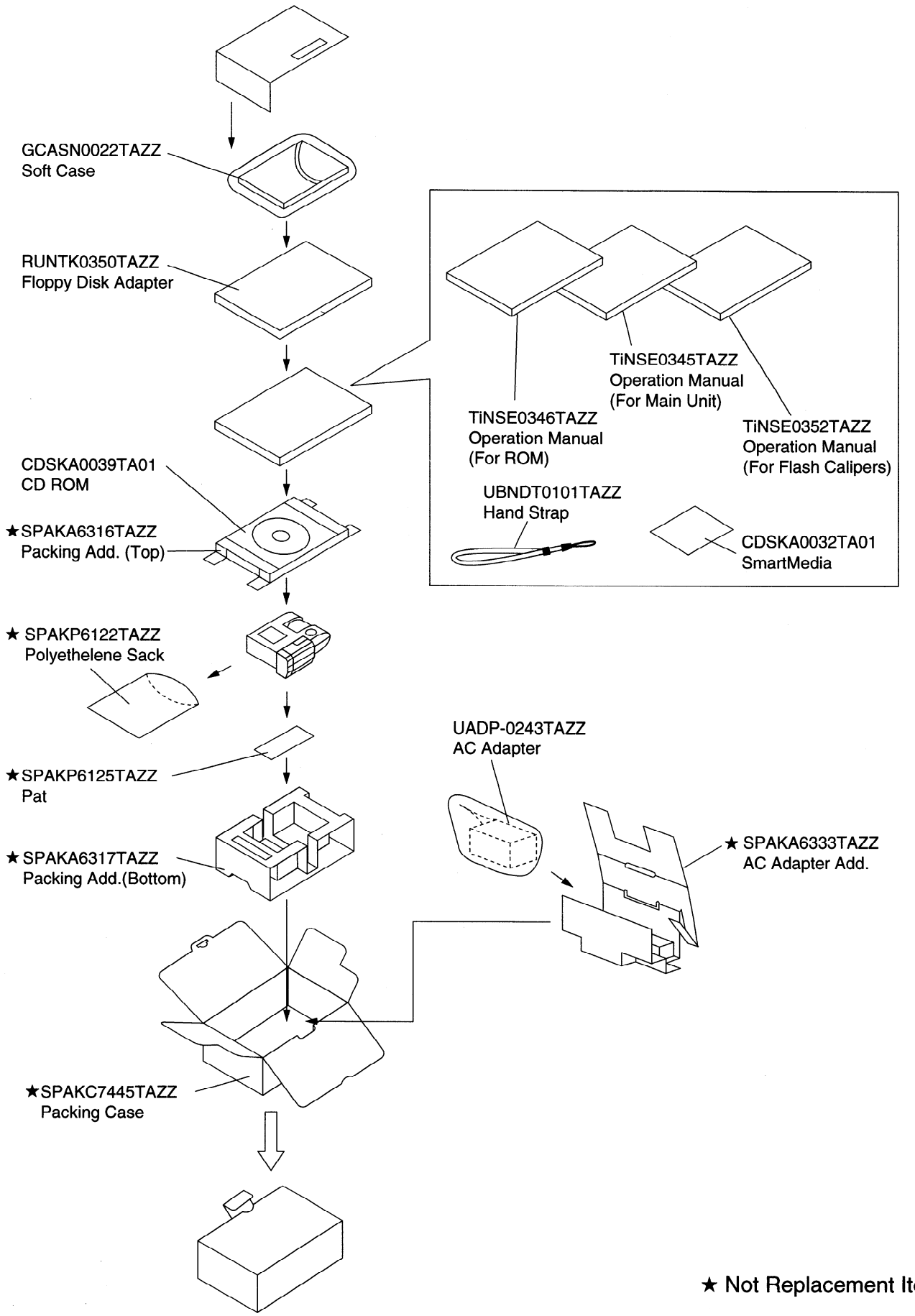
CABINET PARTS

Ref. No.	Part No.	★	Description	Code
1	CCABA6211TAK2		Front Cabinet Ass'y	AR
1-2	GCOVA1617TAKA		Front Grip	AG
1-3	GCOVA1620TAKA		Top Cover	AD
1-4	JBTN-0307TASA		Shutter Button	AE
1-5	TCAUH0235TAZZ		Battery Label	AA
1-6	TLABZ0500TAZZ		POP Label	AG
1-7	PZETV0407TAZZ		Electrostatic Sheet(Shutter)	AB
1-8	CSLiF0011TA01		Slider, Complete	AK
1-9	GFTAB1073TAKA		Battery Lid	AG
1-10	LHLDZ1507TAZZ		Battery Terminal Holder	AD
1-11	MSPRP0195TAFN		Battery Terminal Spring	AD
1-12	LANGK0522TAFW		Battery Terminal Block Base	AC
1-13	MSPRP0199TAFN		Battery Terminal B	AD
1-14	PZETV0409TAZZ		Electrostatic Sheet (Fulcrum Fitting)	AA
1-15	PSPAZ0282TAZZ		Spacer A	AA
2	CCABB6211TAK1		Back Cabinet Ass'y	AX
2-2	JKNBZ0075TASA		Menu Knob	
2-3	GCOVA1618TAKA		Back Grip Cover	AG
2-4	CCOVA1619TAK1		Speaker Cover Ass'y	AF
2-5	JKNBP0180TASA		Power Button	AC
2-6	JKNBP0181TASA		Change Knob	AC
2-7	JKNBZ0074TASA		Cursor Knob	AE
2-8	MSPRC0123TAFJ		Return Knob Spring	AB
2-9	LHLDZ1506TAZZ		Speaker Holder	AD
2-10	LHLDZ1516TAZZ		Bearing Holder	AC
2-11	LHLDZ3041TAZZ		Tripod Base Holder	AE
2-12	RMiCC0087TAZZ		Microphone Unit	AL
2-13	VSP0020P-968N		Speaker	AL
2-14	PZETV0408TAZZ		Electrostatic Sheet (Tripod Spring)	AB
2-15	PSPAZ0303TAZZ		Battery Spacer C	AA
2-16	PSPAZ0304TAZZ		Battery Spacer D	AB
2-17	PSPAZ0296TAZZ		Spacer B	
2-18	PSPAZ0283TAZZ		Speaker Spacer	AA
2-19	PSPAZ0308TAZZ		Mic Spacer	
3	CHLDB1031TA01		Battery Case/Frame Ass'y	AR
3-1	LANGK0475TAFW		Cabinet Angle	AC
3-3	LHLDB1032TAZZ		Battery Holder	
3-4	LHLDZ1508TAZZ		Reverse Connection Prevention Spacer	
3-5	LHLDZ3037TAFN		Strap Holder	AD
3-6	MSPRP0197TAFN		Battery Terminal +-	AD
3-7	MSPRP0198TAFN		Battery Spring	AD
3-8	QCNW-1918TAZZ		Power Connector	AD
3-9	PSPAZ0301TAZZ		Battery Spacer A	AA
3-10	PSPAZ0302TAZZ		Battery Spacer B	AB
3-11	PSPAZ0282TAZZ		Spacer A	AA
31	CANGF0346TA01		Tilt Ass'y	AU
31-1	LANGF0346TAFW		Tilt Frame Ass'y	AG
31-2	LHLDZ1512TAZZ		Tilt Holder	AD
31-3	LHLDZ1513TAZZ		Cam Ring	AC
31-4	LHLDZ1514TAZZ		Wire Holder	AC
31-5	LPLTM0031TAFW		Plate	AB
31-6	MSPRP0196TAFW		Click Spring	AB
31-7	QPWBH2903TAZZ		CCD FPC	AG
39	LANGK0478TAFW		Macro ring Angle	AC
40	LHLDZ1515TAZZ		Macro Adjusting Ring	AD
41	GCABB6212TAKA		Camera Rear Cabinet	AH
42	JKNBP0182TASA		ND Knob	AD
43	JKNBZ0076TASA		Ring	AE
44	LHLDZ1510TAZZ		Knob Holder	AD
45	MLEVF0022TAFF		Macro Adjusting Lever	AD
46	PFiLZ0009TAZZ		Filter	AD
47	PFiLZ0010TAZZ		Lens Cover	AH
48	GCABA6212TAKA		Camera Front Cabinet	AH
49	CSLDM3339TA01		LCD Shield Plate	AH
50	TCAUH0238TAZZ		Label	AA
51	TLABM2008TAZZ		Model Label	AC
71	DUNTK2908PM00		Shutter PWB Unit	—
72	DUNTK2904QA00		TFT PWB Unit	—
73	DUNTK2901QA02		Main PWB Unit	—
74	DUNTK2900QA01		Power PWB Unit	—
75	DUNTK2907PM00		Jack PWB Unit	—
76	DUNTK2906PM00		Tilt PWB Unit	—
77	DUNTK2905PM00		CCD PWB Unit	—
78	DUNTK2902PM00		Control PWB Unit	—
79	VHiLZ0P3641-1		CCD Sensor	BH
80	RLCDV0050TAZZ		LCD	BQ
81	QCNW-1920TAZZ		Connectior	AE
82	QCNW-1924TAZZ		Flat Cable	AD
83	QPWBH2916TAZZ		Flexible PWB	AB
84	LANGK0521TAFW		Cabinet Fastening Angle A	AE
85	PSPAZ0311TAZZ		Cabinet Filler Spacer	AB
87	PSPAZ0298TAZZ		Shutter Spacer	AB
88	TCAUS0554TAZZ		UL Caution Label	AB
89	TLABH0359TAZZ		FCC Label	AB
90	PSPAZ0312TAZZ		Battery Lid Spacer	AC
A	LX-BZ0210TAFN		Screw	AA
B	LX-HZ0056TAFN		Screw	AA
C	LX-HZ0058TAFF		Screw	AA
D	LX-HZ0062TAFF		Screw	AA
E	LX-HZ0055TAFF		Screw	AA
F	LX-BZ0208TAFF		Screw	AA
G	LX-BZ0206TAFN		Screw	AA
H	LX-BZ0208TAFN		Screw	AA
i	LX-NZ3053GEZZ		Nut	AC
K	LX-WZ0054TA00		Washer	AB
L	LX-WZ0051TA02		Washer	AA
M	LX-WZ0053TA00		Washer	AA
N	LX-HZ0057TAFC		Screw	AA

CABINET EXPLODED VIEW



16. PACKING OF THE SET



★ Not Replacement Item

SHARP

COPYRIGHT © 1999 BY SHARP CORPORATION

ALL RIGHTS RESERVED.

No part of this publication may be reproduced,
stored in a retrieval system, or transmitted in
any form or by any means, electronic, mechanical,
photocopying, recording, or otherwise, without
prior written permission of the publisher.

TQ0683-S
Jul. 1999 Printed in JAPAN
SA. NS

SHARP CORPORATION
AV Systems Group
Quality & Reliability Control Center
Yaita, Tochigi 329-2193, Japan